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ILLUSTRATIONS

OF

British Birds,

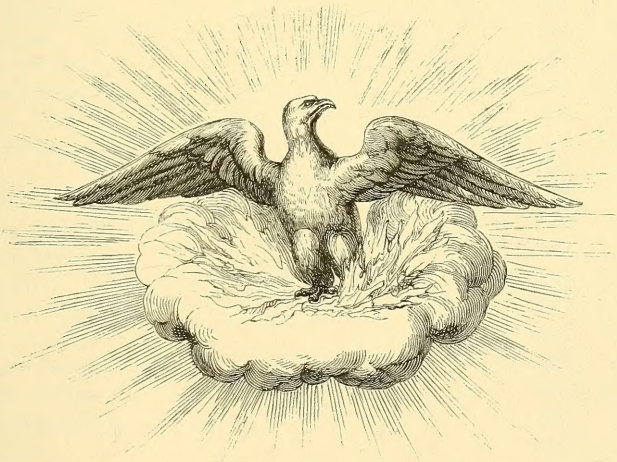
AND THEIR

Eggs.

BY H. L. MEŸER.

VOL. V.

CONTAINING SIXTY PLATES.



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ILLUSTRATIONS

OF

BRITISH BIRDS.

PLATE CLXXXI.

WOOD SANDPIPER.

TOTANUS GLAREOLA.

THE Wood Sandpiper was not formerly considered to be a visitor to Great Britain, until Colonel Montagu, with his usual discrimination, perceived that a species occasionally met with, and which was considered by his contemporaries as simply a variety of the green sandpiper, exhibited the characters assigned by Linnæus to his *T. glareola.* These characters, when once pointed out, are sufficiently distinguishable ; so that no ornithologist of the present day, who examines with his own eyes specimens of the two species which he may chance to obtain, can possibly make any mistake between them.

At the time, however, when Colonel Montagu made

known his observations, this species had but one solitary representative in the cabinets of this country. Subsequently, when specimens supposed to be of the green sandpiper were obtained, some few among them occasionally proved to belong to the newly-recognised species, which thereby recovered its proper place in society.

The geographical distribution of this species extends all over Europe south of the severe climate of Iceland and Norway, and equally over Asia and Africa. It is also found in the United States of America. The usual localities are flat and swampy land, springy pools, and heathy wastes or commons. The specimen from which our drawing is made was obtained in a gravel-pit on Ditton Marsh, in Surrey.

During the months of April and May the Wood Sandpiper migrates northward from its most southern winter quarters, and remains with us until August, when this bird returns associated with small flocks that are on their way back from more northern latitudes. It is principally owing to the Wood Sandpiper travelling during the night season that it is not more frequently obtained; besides which, the bird passes the day-time on the most extensive wastes, where it can run a great distance if it finds itself pursued, without being obliged to take wing for its safety.

The name which the present species bears does not agree with the situations where it is generally found in this country, which renders it, among other circumstances, doubtful whether this species is really the *glareola* of Linnæus; but, as it is now best known by the appellation of Wood Sandpiper, we will not presume to change it: the fact is, that this bird never here frequents woods, unless copses of birch and alder, that surround large tracts of heathy or boggy flats, can be so called.

The locality in which the Wood Sandpiper passes its summer sojourn in our country is invariably extensive open

ground, which we can partly prove by the fact that several specimens are annually obtained on Wimbledon Common, in Surrey; and during the time of migration, it generally alights in swamps where man can obtain no footing with any security from sinking in: it also frequents the muddy shores of lakes of all dimensions, but is never found on the sea-coast.

The Wood Sandpiper is rarely found in flocks, except during the time of migration, but it is not uncommonly seen, in company with redshanks or ruffs, on the shores of lakes or ponds very early in the spring.

The general appearance of the present species is very elegant when seen running about on the ground, to which its slender body and long legs contribute very considerably; and on taking wing it is peculiarly conspicuous, in consequence of its dusky feathering and white rump being so clearly defined, although the contrast of colour is not so great as in the foregoing species.

When the Wood Sandpiper perceives any sudden approach of danger, it remains immoveable until compelled to take wing, when it mounts high in the air and flies off to a great distance, and with a velocity that surpasses all others of its family.

During the time of migration the pecular gathering-note, *giff, giff!* may be heard often repeated, forming a concert or chorus of many voices, and serving to keep together the assembled travellers, until fatigue compels them to alight for rest in some convenient spot. The male bird has during the breeding season another call-note, which sounds like *teatril, teatril!*

It is a curious fact, that the Wood Sandpiper can easily be kept in confinement, and that its constitution will generally overcome a broken wing.

The food of the Wood Sandpiper consists in such small

insects as inhabit the humid localities frequented by it, and more particularly the larvæ of gnats and flies, and also small beetles, small worms, and minute snails, whose shells are now and then found in the stomach of this bird. In order to facilitate the search for the Wood Sandpiper, it may be remarked that this species chiefly seeks its food on the swampy borders of lakes and ponds, where the water covers the ground, or in spots where either grass or reeds of low growth stand in patches: where these places have become dried up in the summer it is in vain to expect to find it.

In the beginning of April a pair of Wood Sandpipers choose their place for forming a nest, which consists in a shallow depression in the ground, lined with a few dry grasses and other small blades of bog plants; in it three or four eggs are deposited, which are incubated by the hen bird, while the male watches for her safety and that of the young brood. Owing to the boggy ground which is chosen for this purpose, the nest is very difficult to find; but the best way to facilitate the search is to take a spaniel dog to the ground where the nest is supposed to be, for the male bird will soon be seen to rise and hover over the intruder, and by these means it will soon become apparent that a nest of the Wood Sandpiper is not far distant, and requires only to be carefully looked for.

The present species measures about nine inches in length; the beak one inch and a quarter; the tarsus is one inch and a half, and the naked part of the tibia one inch, being one half of its length; the middle toe, including the claw, one inch and two lines. The colouring of the beak is black from the tip to the nostril, and from thence to its base greenish flesh-colour; the iris dusky brown; the legs and toes pale pea-green, with a pale blue tinge, and oil-green at the joints: the claws dusky.

The plumage of the young birds and that of the adult in winter do not differ much, but the summer plumage stands alone. The immature plumage is as follows:—A small bar of dusky extends from the base of the beak to the eye, over which is a broad white streak that passes above the eye and surrounds it; the top of the head is dusky, with narrow white edges to the feathers; the back of the neck the same, but more streaked with white; the cheeks are white with narrow brown streaks, as are also the ear-coverts, which are besides tinged with ash-colour; chin and throat pure white; the neck white, with brown shaft-streaks and markings, which become larger and plainer on the chest; the back, shoulders, tertials, and the greater and lesser wing-coverts dusky, with hardly perceptible reflexions of green and purple, and bright rufous triangular spots bordering the edges of the feathers; on the lesser wing-coverts these spots become extinct, and the ground colour of the edge of the wing is much lighter: the quill-feathers are dusky, the first of which has a white shaft; all the tips of the quill-feathers are narrowly edged with white, with the exception of the first; the lower part of the back is dusky; the rump white; the upper tail-coverts white, with small dusky shaft-streaks and spots; all the under parts white; the under tail-coverts have narrow dusky shaft-streaks: the thighs are spotted with brown; the tail white, broadly barred with dusky. Male and female are alike.

The winter plumage differs very little from the foregoing: the top of the head has more decided brown spots; the markings on the back and sides of the neck are narrower, and clouded with ash-colour; the side feathers of the breast and flanks are covered with greyish-brown waving lines; the brown spots on the upper parts are larger and brighter. As the birds advance in age the rufous colouring becomes almost white. The legs and base of the beak are greenish ash-colour.

The summer plumage varies principally in the dusky colouring being richer, and the triangular spots of the entire feathering of the upper parts being silvery, but not pure white.

The adult birds moult in the course of the month of August, and the young of the year after arriving in their winter quarters. By the month of April the adults appear again in their perfect summer plumage.

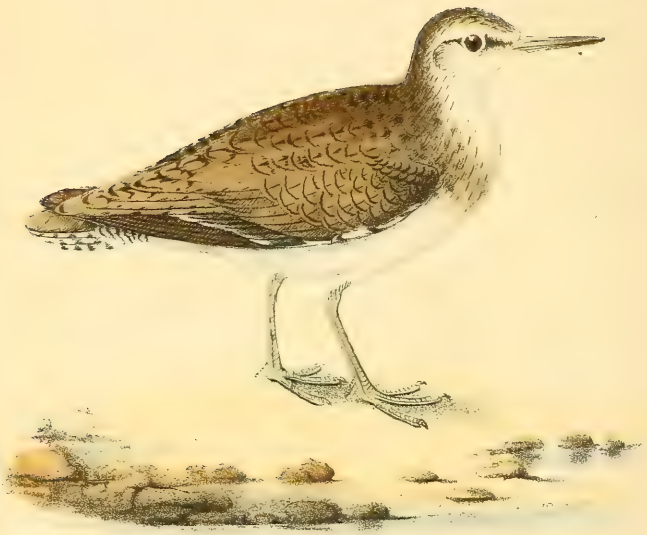


PLATE CLXXXII.

COMMON SANDPIPER.

TOTANUS HYPOLEUCUS.

We are now called upon to describe this very elegant little summer visitant to Great Britain, the Common Sandpiper, or Summer Snipe, which must remind most men, that have ever indulged in an excursion along our beautiful rivers, of quiet enjoyment; since there this bird is generally to be seen on the gravelly banks close to the water, running about incessantly in search of food, or flying to some short distance uttering its pleasing whistling note. This species is found throughout the British Isles, and is equally common in most parts of Europe and Asia, from north to south; it is also met with in some parts of America and Africa. Although it is a well-known bird, we are not aware that it is anywhere met with in great numbers: on the banks of the Thames we have seen, in one or two instances, a dozen or fourteen together.

About the month of April the Sandpiper arrives in this country from the south, and remains with us until August and September; after which time it is rarely seen, unless the autumn is very fine. In the spring of the year the present species arrives with us singly, or at most in pairs, and it is only about the latter part of their sojourn with us that they are seen in small flocks, but even then at most not exceeding twenty or thirty. Like most others of its tribe, this

sandpiper travels during the night: towards sunset it begins to shew great restlessness, and continues to fly about until dark, uttering its pleasing whistle, when it rises high in the air, and moves off in a southern direction.

The localities frequented by the Common Sandpiper are the banks of rivers of all dimensions, whether the country is flat or hilly, or the district open or wooded; but the rivers or streams, whose height is continually varied through floods, tides, or the effects of locks and weirs, are preferred, in as much as the receding water is sure to leave behind a fresh supply of food upon the exposed gravel or mud.

There is no other species of this present family that seems so frequently to be seen among osier plantations, and other cover that skirts the water's edge. When in pursuit of this bird, we most generally find it on the gravelly wet banks near the water; on large moss-grown stones in the river; on the flat wood-work over which water runs continually, and where the slippery weeds hang about the same; and also in shallow water, where the current has no strength to wash the bird off its feet.

It is a very pretty sight to see this bird run over the surface of the leaves of the water-lily, and amusing to observe how it is sometimes disturbed and tormented by the pied wagtail, its frequent associate in these localities, during which time the Sandpiper expresses its impatience by uttering its high note of disapproval.

The flight of the Sandpiper is easy and swift: when flying only to a short distance, it skims close over the surface of the water, and most generally settles again very nearly opposite to the place it started from; when, on the contrary, it is leaving the neighbourhood, it flies at a tolerable elevation. We are told that this bird is very well able to swim and even dive, but we have never experienced this ourselves, although the snipe sometimes swims as well as a rat. a circumstance

which we have witnessed more than once. Owing to the fact that the Sandpiper never hides nor squats, it is a very easy bird to approach with a gun.

The present species is not remarkable for sociability; for whether a flock starts on the wing together, or alights at the same time, each bird follows its own inclination, without paying the least attention to the call-note of its companions.

The call-note of this bird is best expressed by the word *heedeedee, heedeedee!* the second syllable being uttered loudest, the tone much resembling that of a flute; it approaches nearest to the call-note of the king-fisher, but is not so shrill, and at least two notes lower in music. It is very remarkable how often this call-note is repeated when the bird is on the wing; we may almost assert that this repetition amounts to from forty to fifty times. It is not difficult to keep the Sandpiper in confinement, if only slightly wounded in the wing in obtaining it.

The food, in a natural state, consists of small insects and their larvæ, and with these many grains of sand are swallowed; the insects consist chiefly in flies, gnats, and water-spiders, but rarely snails, if ever so small.

About the middle of April these birds pair and choose the spot for their nest, which is on the ground, always above the highest water-mark to which any spring-flood reaches; the distance from the water is not great, the nearest suitable spot for the purpose being chosen, but the nest is so carefully hidden under the lower branches of willows, osiers, &c., that it is exceedingly difficult to find it; and there is never an entrance to it but from one side only. The nest is little more than a hollow in the ground, neatly lined with dry grasses, and a few dead leaves of the willow. The number of eggs never exceeds four, which are hatched by the mother in about fourteen days; and the young leave the nest as soon as they are dry, when they hide themselves

very carefully among the surrounding willow-stumps and branches. In a month from the time of their birth the young require no longer the aid of their parents, and may be seen feeding in the same spots that the adult frequent.

The Sandpiper measures from seven inches and a half to seven inches and three-quarters; the expanse of its wings is from fourteen to fourteen inches and a half. The plumage is of a silky texture; the upper parts, from head to tail, olive cinereous dusky; the shafts of the feathers black; the quills dusky; cheeks, sides of the breast, and neck delicately marked with dusky streaks, and clouded with bluish-ash and yellow ochre; from the upper mandible to the eye extends a dusky streak; the eye is dusky; beak dusky, with pale fleshy ash-colour at the base. The legs are pale bluish-green, with transparent brown at the joints of the knee, foot, and toes; claws dusky. The central tail-feathers dusky; the next barred with dusky and white: all the under parts are puré white. In summer plumage the lesser wing-coverts and scapulars have a black border near the tip of each feather, which appears to be wanting in winter plumage.

The male and female are alike; the young have the pencilled markings on the feathers somewhat different, and some of the feathers on the upper plumage are bordered with cream-colour and black, thereby giving the whole a much more varied colouring.

The egg figured 182 is that of the Common Sandpiper.

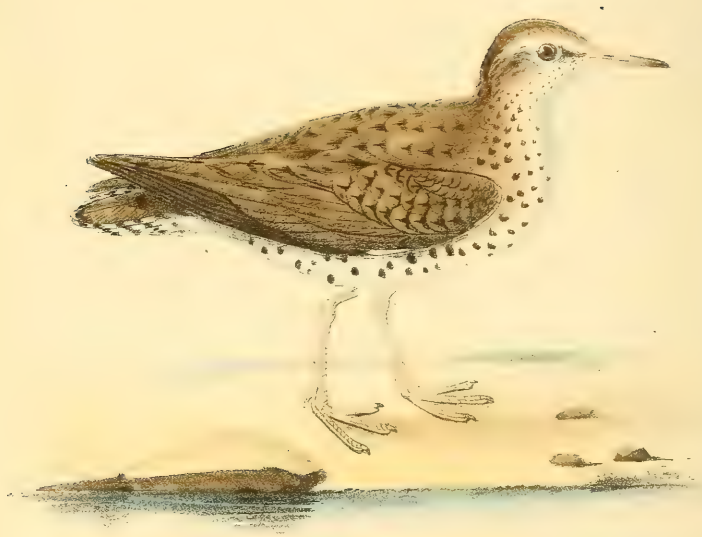


PLATE CLXXXIII.

SPOTTED SANDPIPER.

TOTANUS MACULARIA.

The Spotted Sandpiper is a rare occasional visitant in Britain, and still more so on the continent of Europe: its true country is America, where it is found from the northern provinces of Canada to the Gulf of Mexico, extending over the West Indian Islands. The specimens that have been recognised in this country have all been adult birds; it is possible that the resemblance the young birds bear to our European sandpiper has prevented their being recognised as visitors here.

For the best information on this subject we have to look to American ornithologists, upon whose correct accounts we can rely with safety, since their information is obtained from the study of nature and not from books; but the habits of the Spotted Sandpiper are so much like those of the Sandpiper last described, that it would only be a repetition of the same account.

The locality preferred by the Spotted Sandpiper is the banks of fresh-water rivers or lakes, and particularly in wooded districts; it is very rarely seen by the sea-side.

The food is obtained by the water-side, and consists in insects and their larvæ.

This bird migrates northward to breed in the spring of the

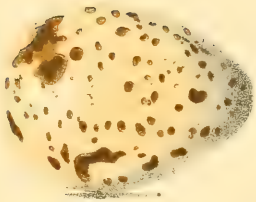
year, and in the same manner as the foregoing species, placing its nest in a well-hidden spot. The eggs are four in number, and marked as represented in our Plate.

The length of the Spotted Sandpiper is from six inches and a half to seven inches, according to age and the matured length of the beak and tail-feathers.

The plumage, being equally silky in texture, very much resembles the common sandpiper, although there appears a warmer brown and more decisive olive reflexion on the dusky feathering; the upper parts are all of this colouring, and the under parts are white, with numerous round spots of the above-named dusky colour. The iris is dusky, as is also the streak through the eye from the base of the upper mandible to the sides of the head. The beak is dusky towards the tip, and flesh-coloured about the base; the legs are flesh-coloured; the claws dusky brown.

The young birds have spots disposed over the under parts, although by far less distinct. Male and female are nearly alike.

The egg figured 183 is that of the Spotted Sandpiper.



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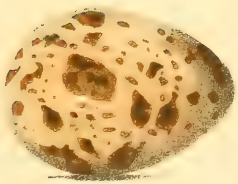


183

PLATE CLXXXIV.

GREENSHANK.

TOTANUS GLOTTIS.

The Greenshank is a summer visitant in Britain, and most numerous during its spring and autumn migration, although at no time common. Its distribution extends over portions of Europe, Asia, Africa, and America. In Europe it is seen in every part; in Asia, from Siberia southward to Bengal: in Africa it is most frequent in Egypt and Nubia; and in America it is found from North to South: but there also occurs a species (*Totanus melanoleucos*) much resembling the present, in South America, with which it has been sometimes confused. The Greenshank appears to give no exclusive preference to flat countries, since it is frequently met with on the borders of the lakes of Switzerland, as well as of Scotland. In the flat parts of Holland it is very frequent. The most likely locality for the Greenshank to be met with is on the soft muddy banks of lakes, ponds, rivers, and bogs, at no great distance from the sea, and also on the flat sea-shore itself; but, owing to its generally giving the preference to sweet water above salt water, this species, as soon as it alights on our sea-shores, begins to work its way inland.

The birds that visit us are most probably stragglers from the flocks which pass over the Continent in a north-easterly direction in the spring of the year; some few, however,

remain to breed, for, according to Mr. Selby, the young have been seen on the borders of Loch Awe in July, and an adult specimen which was shot in Scotland in the month of May came into that gentleman's possession. We also know of a specimen having been shot on the Thames in the month of June, near Walton, in Surrey.

The food of the Greenshank consists of aquatic worms and insects, and also of small fish that are found in pools of shallow water, and small crustaceous animals, which it looks for on the water's edge or in shallow pools. This species prefers feeding-places that are situated in open ground, where it can keep at a proper distance from its enemies; for which reason it is rarely found in wooded and sheltered parts; yet it has been seen perched on the branch of a tree in some few instances. On the Continent this species occurs more frequently than in corresponding latitudes in our country, the nature of many parts of Europe being better adapted to its habits than our islands. Still water it prefers at all times to rapid streams, resembling in that respect others of its family; consequently, a black, muddy flat under shelter of the bank of a river, or a ridge of this soft foundation that extends far out on the river or lake, is the most likely spot in which to meet with this bird; but sand banks or flats do not seem to furnish it with food, since it is not seen to alight upon or frequent them. During its search for food it proceeds quietly about with its body in a horizontal direction; it also wades very frequently to the full extent of its long legs, and in case of need swims and dives in a perfect manner, opening its wings under water, and thus pushing along with great rapidity.

In flying, the Greenshank does not extend its wings fully, but beats the air in regular and quick succession; its head and legs are then thrust out at full length, and consequently form a straight line. On alighting it generally

comes down in a sloping direction, but sometimes with such swiftness that it is obliged to throw its body to the right and left in order to break its fall, and at last quite opens its wings, in order to skim a yard or two before touching the ground. The present species is the most careful and shy of all its tribe, and, unless a sportsman can take it by surprise, it cannot be approached within a hundred yards: the best mode of getting a specimen is by placing a stuffed Greenshank on a suitable spot, where a person can be hidden within gunshot, as this species is sociable with its own, as well as with other nearly allied species; but the instant it comes down it must be fired at, for fear of the deception being discovered. The sociable nature of the Greenshanks also shews itself in their generally flying about in small parties, and calling the straggler stowards them whenever they meet: they also fly in company with snipes and other species of their own family, and will allow any of these to accompany them during their migration.

The call-note of the present species sounds like the word *tea-ah, tea-ah!* which it utters on the wing or on the ground in quick succession, twice or thrice; and when several of them answer one another, this forms a very melodious sound, owing to its fulness of expression.

In confinement the Greenshank becomes tame, and will exist for some time, owing to its hardiness.

This species chiefly breeds in high northern latitudes. The nest is said to be placed on the ground in a hollow, like that of the lapwing. The eggs are four in number, rather larger than those of that species.

The length of the Greenshank is nearly twelve inches, and its summer plumage is as follows:—The top of the head, back of the neck, back, and scapulars consist of dusky feathers with paler edges; the larger feathers of the scapulars and tertials are black in the centre and regularly edged with

a border of white spots; two narrow white bands are formed on the wings by the white tips of the feathers forming the greater wing-coverts; the feathers which cover the shoulders of the wings are liver-coloured; the rump is white; the upper tail-coverts have a dusky spot or bar on each feather near their tips, and the shafts are dusky; the tail is barred with dusky and greyish-white; a dusky space between the beak and eye extends in small spots over the cheek, and communicates with more numerous and larger drop-shaped dusky spots over the sides and upper part of the breast; the under parts are pure white from the chin to the vent. The base of the beak and the legs are blueish-green; the claws and tip of the beak dusky; the iris sepia.

In winter the plumage differs greatly, and, although not so strikingly showy, is, on closer inspection, wonderfully beautiful. The ground colour of the upper parts, with the exception of the pure white rump, is a pale blueish-ash; the top of the head, nape, cheeks, back, and sides of the neck are spotted with small dusky centrals and shafts to each feather; the upper edge of the wing-coverts, frontal edge, and quills are dusky; the feathers of the tippet have the dusky central spot broader; those of the back and wing-coverts are finely pencilled with dusky, and the tertials and greater wing-coverts have the peculiar triangular spots on their edges; the tail-feathers are narrowly barred with dusky and greyish-ash: all the under parts are pure white; legs and beak the same as in summer plumage, but paler; the iris dusky.

The beak of the Greenshank is straight from the forehead to the middle, but from thence to the tip considerably turned up.

PLATE CLXXXV.

AVOCET.

RECURVIROSTRA AVOCETTA.

The Avocet occasionally visits our eastern shores, such as Durham, Lincolnshire, Norfolk, and Kent, and has been known to breed in the fenny districts of Lincolnshire and Norfolk, and in Romney Marsh; but, owing to some unknown circumstances, it does not occur so frequently as it used to do, which is unaccountable enough, as it is rather plentiful in North Holland. This bird is well known in many parts of Europe and Asia, and spreads over most parts of Africa from north to south. On the continent of Europe, it ranges from Siberia through Tartary, Russia, the borders of the Black Sea, Hungary, Italy, and Spain; and is frequent in France and the borders of the Baltic. In Sweden it is of rare occurrence.

This species is migratory, and arrives in this country about April, and departs in September. We met with a very experienced sportsman a year or two ago in London, in a room where an Avocet was preserved in a case. He remarked to us that we might see plenty of these birds on the muddy flats at the mouth of the Thames, where they run about in great numbers beating the mud with their turned up beaks, in order to rouse up the insects that lie concealed below the surface; and this account agrees very much with a statement

in the twenty-second number of the "Zoologist," (p. 719,) which says, "The Avocet is not uncommon. Formerly they bred in Romney Marsh in great numbers, but are now less frequently met with. Mr. Plomley has four in his collection, and could have procured many more. A nest of young ones was found in 1842, and last summer Mr. Plomley killed two young birds on the wing."

The migration of the Avocet is performed during the night, and chiefly along the sea-coast, which in a great measure accounts for our rarely seeing one of them inland; and, moreover, the propensity of this bird to prefer at all times salt-water is sufficiently conclusive. The soil preferred is black soft mud, and in particular such as has been left exposed during low-water. On sandy, rocky, or shingly shores it is never seen. It is also particularly fond of salt marshes, which are in a humid but not a perfectly wet state, and to which it can resort during high-water; and where such are wanting, the bird seeks for pools and creeks that the tide fills partially, where it can remain until the low tide has left the feeding-ground bare again. About the middle of the day the Avocet roosts, standing on one leg, and resting its head on its back and its beak on the upper part of the breast. Its feeding time is regulated by the tides, and its movements or migration occur chiefly during the night.

The general appearance of the Avocet is very ornamental to the locality it frequents, owing to the pure white and deep black of its feathering. Its walk is easy and graceful: it is also able to run very fast, which it does invariably close to the water's edge when pursued, standing every now and then still, raising its head sharply and lowering it again, and at last, if the pursuit is kept up, it flies up high in the air and leaves the neighbourhood. Swimming may also be ranked among its capacities, during which exercise it nods with its head at every stroke.

The flight of the present species is very different from that of most others of its family, owing in part to its bending its wings into perfect arches during their movements: the wings are either beaten in quick succession, or more moderately, according to the pleasure of the bird. During the breeding season they fly great distances low over the surface of the water, but pursue their migratory journey at a great elevation. The form of the Avocet when on the wing is particularly strange, in consequence of the head being drawn close to its body with the beak bent somewhat downwards, and the legs projected out very far behind. On alighting, it opens its wings for a moment high above its back, and then closes them very carefully.

By nature the Avocet is shy and watchful, but sociable towards its own species. They travel generally in small flocks, but sometimes unite in great companies; they also remain together in companies in and about their breeding-places.

The call-note can be best expressed by the word *kwee*, *kwee*, uttered in a piping tone, but not very loud.

The food of the Avocet is marine insects and the soft spawn of the crustacea; but it would be very difficult to enumerate any in particular, since the bird has the propensity of emptying its stomach as soon as it is wounded, and the digestion going on so fast among this tribe of birds, it is impossible to form any conjecture with certainty.

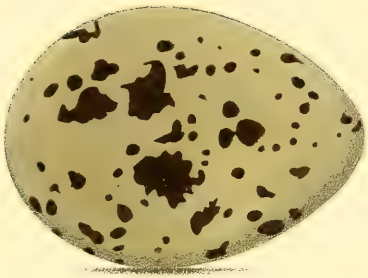
The very extraordinary shape of the beak, and its soft whalebone-like consistency, seem to be adapted for selecting some particular food with which we are not yet acquainted: the use they make of their beaks in beating the mud is possibly the only meaning of its being turned up towards the tip. The manner in which the Avocet takes its food from the surface is by scooping right and left, with a precision and swiftness that cannot be eluded by the insects which rise up in all directions in its path. When the Avocet is swimming

in company with ducks or other water-birds, the peculiarity of its habits is more perceptible; it dips its beak from time to time in the water in the same manner as on the ground, but never puts its head under, being content with skimming the surface. In consequence of the delicate nature of its sharp-pointed and soft beak, sandy or shingly ground will not suit its habits.

The chosen spots for breeding are on the uneven ground near their usual haunts, where short marine vegetation and grass cover the ground, just above high-water mark. They always breed in companies close together, the nest itself being a hollow scratched in the ground and lined with a few grasses and dry roots of marine plants: in it three or four eggs are deposited, as represented in our plate, and these are incubated in turn by both male and female. In eighteen days the young are able to creep out of the shell, and leave the nest as soon as they are dry enough. If any one approaches the nest during the time of incubation, the parent birds fly circling round the intruder, uttering their call or alarm-note; the young birds secure their safety as soon as they can run about by squatting close to the ground in the hollows of its surface, or between patches of vegetation, and are very difficult to find.

The male measures about eighteen inches in length, and the female seventeen inches. The adult bird has the top of the head, nape, and two-thirds of the back of the neck black; the scapulars, lesser wing-coverts, and quill-feathers also black: the rest of the feathering is pure white, with a tinge of pale buff on the under parts. Its beak is black; the iris deep red-brown; the legs bluish-ash colour. The male and female are alike, but the young of the year have the parts which are black in the adult (with exception of the quill-feathers) umber-brown, with paler edges, and the white is more or less tinged with raw-umber; iris dusky, as well as the beak.

The egg figured 185 is that of the Avocet.



185.

PLATE CLXXXVI.

BLACK-WINGED STILT.

HIMANTOPUS MELANOPTERUS.

The Black-winged Stilt is occasionally met with in Britain, but is not frequent. Several ornithologists have enumerated and described British killed specimens, both in Scotland, Ireland, and England; still it is considered by all to be rather scarce.

The geographical distribution of this bird extends over most of the temperate and warm climates of the four quarters of the globe: in America there occurs also another species, for which it has been mistaken, owing to its great resemblance to ours. In Europe it is most plentiful in Spain, Italy, Greece, Hungary, and the southern provinces of Russia.

The Black-winged Stilt is a migratory species, working its way northward in May, and southward as early as August. In Hungary many pairs breed annually, but rarely farther north; and it is only in warm fine weather that some individuals extend their journey as far as our isles. The migratory movements of the present species are performed during the night. When they are disturbed during the day they fly off to some distance, but are very apt to return to the same spot again the next day; and where they are observed to alight or to haunt they generally remain for some days, which circumstance facilitates the capture of specimens very

considerably. The situations most suitable to this bird are the borders of lakes, ponds, and extensive watery flats: the banks of rivers or the sea-coast are only its resting-place for want of other more suitable spots. On the borders of the Caspian Sea and the extensive boggy flats in Hungary, where large beds of rushes abound, several pairs breed annually: it is thus evident that still water invites this species more than currents or rapids.

The general appearance of the Black-winged Stilt is so different from that of all other British birds, that it can hardly be possible not to notice it whenever it shews itself on the ground. In the first place, the pure black and white of its feathering distinguish it, but especially its long red legs, which latter have no match in proportion to the size of the bird. Its manner of walking is also remarkable enough, owing to its long legs, and it needs no great extent of imagination to think at what a swift rate it can walk if urged so to do: nevertheless, the stilts or long legs of this species appear not merely intended for the purpose of accelerating its speed by land, but principally for wading to a great distance in the water, where it may be seen standing perfectly still, while it catches the flying insects, which hover over the surface, with an astonishing ease and certainty. When the bird flies at no great height it shews its long slender legs to great advantage, as they are carried straight out behind. The body itself is very small and slender; its wings are much bent down in its flight, and the neck not much extended, with the beak pointing downwards. Its flight is not quick, but steady and regular. During the time of migration it often flies at a great elevation.

The Black-winged Stilt is less shy than any other of its family, but, nevertheless, not to be approached within gun-shot in an open situation: it does not squat or hide among flags or rushes.

The food of the present wader consists in small insects that hover close to the surface of the water or bog, small beetles and their larvæ, as well as the spawn of frogs and other aquatic creatures. Small worms it pulls out of the mud, and frequently out of the water. It captures small fish or fry, by dipping the head and neck at full length below its surface.

The nest of the Black-winged Stilt is placed on a raised lump of the surrounding bog, and consists in a cup-shaped depression, with little or no lining: in it four eggs are deposited; these are described as being pale blue, spotted with olive-green and brown, but we are unable at present to offer a representation of this rare egg, until an opportunity presents itself upon which we can rely with certainty.

The entire length of the Black-winged Stilt is rather more than thirteen inches; its beak two inches and a half; naked part of the tibia three inches and a half, the tarsus four inches and a half.

The top of the head and nape are black mixed with white; back and wings black with greenish reflexions; forehead, cheeks, and all the under parts pure white, with a tinge of rose-pink about the breast and belly; the tail ash-coloured: the beak is black; the irides carmine red, and the legs Venetian red.

Pl. 187.

PLATE CLXXXVII.

BLACK-TAILED GODWIT.

LIMOSA MELANURA.

The periodical occurrence of the Black-tailed Godwit is not uncommon in Britain; it visits us in the spring of the year, on its passage to more northern climes, where it breeds in greater numbers, and appears again in the autumn, on its return to pass the winter in the southern countries of Europe and Asia. The geographical distribution of this species extends pretty generally over Europe, Asia, and Africa, although it is found more plentifully in some countries than in others, and appears to give the preference to those that are situated nearest the sea; consequently, it is met with in most parts of Great Britain, where it also remains to breed in localities suitable to its habits. In central Europe it is least numerous, and in some places rare.

The locality preferred by the present species is extensive flats of moist, and boggy ground, intersected with ditches, canals, and swamps; it is very rarely seen on a shingle or sand bottom. Low meadows, with rank grass or aquatic vegetation, only a few inches in height, and thinly covering the ground, the Godwit frequents by choice, where it may be seen busy in pursuit of its vocation, namely, seeking its food. The reason assigned for these birds frequenting such barren

ground is, that they may be aware of the approach of an enemy.

The habits of the Black-tailed Godwit are like those of most of its tribe; in flight, it opens its pointed wings at full length, and beats the air in regular succession; but when hurried, its wings are only half opened, and the strokes become very quick, whereby its speed is very much increased. Its walk is not unlike that of the stork, and when at rest, it invariably stands on one leg, as represented in our Plate.

We have taken great pains to study the natural positions of the more uncommon British Birds, that are not readily met with in a wild state, from living specimens that we procured for that purpose, and which we kept in confinement for several years, taking care to supply them with artificial ground that suited them. It is more interesting by far to have a collection of living birds, as we have had (for the purpose of bringing out our quarto edition of British Birds), than the largest collection of stuffed specimens that can be brought together, with all their varieties; and we can recommend the undertaking to any one who has the means, and sufficient room in his grounds, to try the experiment, provided he overlooks the general treatment of the birds himself, and has a keeper who is careful to supply their wants, and to keep the cages or grounds clean, and well supplied with fresh water. The first reward for such an establishment consists in being enabled to watch the manners and habits of the birds, and next to observe the changes of plumage during moulting; the different notes of the birds are equally amusing. One great drawback we must not forget to mention, that will always attend this fancy, namely, that one never enjoys the sight of stuffed specimens again.

The present species is exceedingly shy, and the adult birds cannot be approached within gunshot while feeding or resting

on the ground, at any other time than when they have a nest or young ones. When asleep this species generally stands with its head behind its wing.

The food of the Black-tailed Godwit is obtained by boring the ground with its long beak, and drawing forth worms and aquatic insects of divers descriptions. The time of feeding is early in the morning or late in the evening, either on the muddy shores of rivers, or in meadows where worms may be found in abundance, but moonlight nights enable it to continue feeding later.

Migration always takes place during the night; mid-day being the time for roosting. Sociability is not among the virtues of these birds, for, except during the time of migration, when they unite in troops of forty or fifty individuals, they are not fond of each other's company. About the beginning of April this bird arrives in its breeding-place with its mate, and forms its nest on the ground, not far from the water's edge; the construction of the nest is very trifling; the hole, which is scratched in the ground, and only deep enough to hold the four eggs, is scantily lined with a few grasses and roots. The bird takes no trouble to conceal her nest, in which the eggs lay so exposed that they are easily seen. The ground where the Black-tailed Godwit breeds is, low wet meadows or grassy banks near water, in places least frequented by men.

The parent birds are very much attached to their young ones, which they endeavour to defend to the last, by flying round and round the intruder or enemy; the young birds are so expert in hiding themselves as soon as they leave the nest, that it is not very easy to find them without the aid of a dog. As soon as the young begin to flutter about, the parents leave them, and retire to some lonely spot, where they await their change of plumage or autumnal moult, and then begin to migrate southward. The young birds of the year invariably

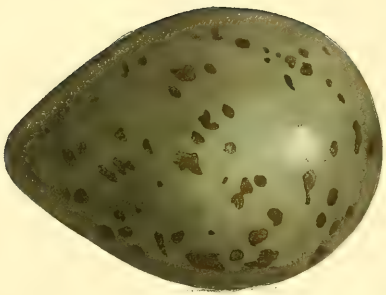
leave their birth-place last, and are eagerly looked for by sportsmen, who either shoot them, or take them in horse-hair springes or nets, for the quality of their flesh is equal to that of the snipe, and they are much superior in size.

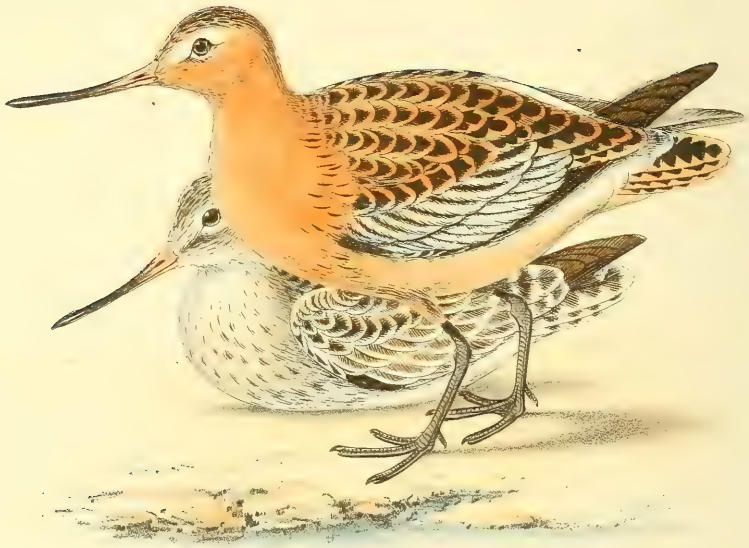
The entire length of the Black-tailed Godwit is seventeen inches and a half; the beak, from the forehead, measures four inches and a half; the tarsus, three inches three lines; the tibia nearly two inches; the tail three inches and three quarters; the wing, from the carpus to the tip, nine inches and a half.

The feathering of the male in summer plumage is as follows:—The crown of the head reddish-brown, streaked with black; the forehead, streak over the eye and chin, white; cheeks, neck, and breast, pale reddish-brown, the breast barred with dusky. The back and scapulars black in the centre of the feathers, each of which is margined and barred with reddish-brown. Lesser wing-coverts dusky; the greater coverts deeply margined with white. Belly, thighs, under tail-coverts and vent, white; the rump white; tail black, the base of the feathers white. Beak orange at the base, the tip black. Iris dusky: legs lead colour.

In winter, the plumage differs greatly. The head, neck, upper parts of the breast, back, and scapulars, are cinereous, darkest in the centre of the feathers. The wing-coverts more dusky, deeply margined with pale, greyish ash. The whole of the under parts white; quills are dusky, with a white spot at their tips. The shafts and the basal parts of the outer webs of the quills white, forming a bar across the wing when open; the tail black, and all except the two middle feathers, are white at the base, this white in summer plumage never shews, unless the bird flies or spreads its tail. The base of the beak is yellowish-orange, the tip dusky.

The egg figured 187 is that of the Black-tailed Godwit.





PL 188.

PLATE CLXXXVIII.

BAR-TAILED GODWIT.

LIMOSA RUFA.

The Bar-tailed Godwit is a well-known British Bird, more numerous than the black-tailed godwit, according to some ornithologists, and rare according to others: such contradictory accounts can only be reconciled by considering various circumstances, as is in many instances the case: namely, whether the locality where the ornithologist resides suits the bird or not, and what opportunity he has to investigate the matter. The greater number of this species that are killed here, occur during the time of migration and in winter, but we know of no instance of its having been captured or seen during the summer.

The geographical range of the Bar-tailed Godwit is most probably much the same as that of the black-tailed godwit, although we are told that it migrates neither so far north nor south. According to Temminck, it inhabits the borders of the Baltic in great numbers, and all the swampy marsh-lands of Germany; and visits the coasts of Holland, France, and Spain, during its double migration, in great numbers.

The locality preferred by this bird is well indicated by the countries it visits, namely, fenny, boggy, marshy, and

swampy borders of seas, rivers, ditches, ponds, and lakes. We are credibly informed by an eye-witness, that the numbers of this species that visit the western coast of Denmark during the month of May, on their passage to the north, is so great that it is impossible to give a numerical description of them; the islands between the mouth of the Elbe and the west coast of Jutland are perfectly covered with them, and at low water the shores are covered in parts to such an extent that the eye cannot compass their lines. On the eastern shores of Denmark it is remarkable how few are met with, comparatively speaking.

Small flocks are seen in the autumn on the borders of the Rhine, Elbe, and Oder, but these consist chiefly of young birds. The greater numbers being found on the sea-coast, where the country is flat and marshy, prove the fact of their being maritime birds. During high water, the Bar-tailed Godwits retire to the neighbouring meadows and fens, where they appear ever restless, looking out from time to time whether the sea-water retires, and as soon as they become satisfied that some land re-appears, they fly up in a body, and continue to follow the receding waters together, in search of their favourite food, which consists in the smaller worms and maritime insects and their larvæ, minute beetles, and the smallest shell-fish.

The general appearance of the Bar-tailed Godwit is very handsome; its finely arched neck; its moderately sized legs and beak assist in producing a pleasing effect, while the body is carried in a horizontal position. Its walk is steady and graceful, to a greater extent than in any of the other European Godwits, but not quick, although it is well enabled to run fast, if required to do so. When in the act of feeding, this bird wades frequently up to its belly in the water, but is never seen to swim or dive from inclination or free-will.

Its flight is in all respects like that of the foregoing species, and when alighting it generally raises the tips of its wings straight upwards just before touching the ground.

Of the reproduction of this present species, nothing is known beyond the fact of its going northward in the month of May, and, as before mentioned, remaining all that month and part of June about the coast of Denmark, and that it returns southward again in August. It appears somewhat doubtful where the intermediate time is past. Linnæus mentions Lapland; and the only representation of the egg that we know of is given by Thienemann, a continental author, who obtained his specimen from Norway. The appearance of the egg is as follows:—Its shape is somewhat smaller and narrower than that of the black-tailed godwit, its colour a pale brownish-olive, with grey spots in the grain of the shell, and greenish dusky spots and dots on its outer surface, particularly disposed about the larger end. It is probable that the number of eggs is four, such being the case with snipes in general; and the habits of the bird leave little doubt of the nest being placed on the ground among short grass or other herbage. We cannot help expressing as our opinion, considering the circumstances above-mentioned, that this species retires inland to breed, journeying for that purpose to the extensive marshes of upper Sweden, and Finland, and part of Lapland; the time of two months, during which only it is absent from the coast of Denmark, being too limited for a distant northern journey. Temminck says that it breeds in England and Holland; if so, we shall one day or other hear of the eggs being found, but until then we are not inclined to go in search of them.

The male, in summer plumage, is a very conspicuous object; its head and back part of the neck pale orange-brown, with streaks of dusky; chin and streak over the eye reddish-

white ; front and sides of the neck, and all the under parts, reddish-brown ; the back and scapulars are dusky, with edges and oval spots of orange ; rump and tail-coverts white, with the centres of each feather hair-brown ; some of the tail-coverts edged with orange-brown ; wing-coverts cinereous, with darker colouring on the middle of the feathers, and white edges. The feathers of the belly and vent edged with white; the flanks and under tail-coverts streaked with dusky. The outer webs of the quill-feathers are black, the inner are dusky and mottled with white on their edges ; their shafts white. The tail is barred with dusky and reddish-white ; the beak is flesh-red at the base, its middle clove-brown, and the tip black. The legs are lead coloured ; iris dusky.

The winter plumage differs much, and must be described as follows :—The top of the head, the neck and breast are greyish white, streaked with dusky ; the back and scapulars cinereous, the edges of the feather palest ; the shaft and centres of the feathers slate coloured ; wing-coverts white, the centres of the feathers dusky. The quills are the same as in the summer plumage ; the tail transversely barred with dusky and very pale grey, approaching to white. Throat, belly, and vent white, tinged with yellow ocre, and pale grey ; the thighs and under tail-coverts streaked with dusky.

The entire length of the Bar-tailed Godwit is seventeen inches and a half; the beak measures three inches ; the wing, from the carpus to the tip, eight inches ; the tarsus is one inch eleven lines ; the middle toe one inch five lines.

PL 180

PLATE CLXXXIX.

BROWN SNIPE.

SCOLOPAX GRISEA.

The Brown Snipe is a very rare and accidental visitant in Great Britain, and was added to the list of British birds by Col. Montague, who obtained a specimen in winter plumage on the coast of Devonshire. Another bird, in summer plumage, is related by the Rev. L. Jenyns to have been captured near Yarmouth. The eastern coast of North America appears, from all that we can learn on the subject, to be its principal resting place during the months of April and August, when travelling north and south; in the spring to more northern climates to breed, and in the autumn southward towards the equator, where it passes the winter.

The locality where the Brown Snipe is met with in North America, is much the same as that which the godwits frequent, namely, soft, muddy, and marshy flats by the sea-side, differing, however, in its frequenting also the sandy flats and sand-banks at low water. Its food is obtained most probably not so much in the water as in the mud, by boring for it with its beak; our reason for this observation is owing to the proportionately short tarsi, and

more extensive palmation of the toes, and finally its very long straight beak.

The food itself consists in small univalve mollusca.

Respecting the breeding and eggs of the present species, nothing has as yet been ascertained, and consequently, the nestlings are also unknown. According to Wilson, the American ornithologist, the flesh of the Brown Snipe is exceedingly fine flavoured, and the American sportsmen slaughter immense numbers for the table every time that these birds visit their coast.

The entire length of the Brown Snipe is eleven inches; the beak two inches and a half; the wing, from the carpus to the tip five and three quarter inches; the tarsi one inch and a half; the naked part of the tibia seven lines; the middle toe one inch two lines. These are the dimensions of Montague's specimen in the British Museum.

The crown of the head is reddish-brown, streaked with black; between the beak and the eye is a dusky streak; above the eye runs a white line; the nape and back of the neck are yellowish-brown, streaked with dusky: the upper part of the back and scapulars have the centres of the feathers black, and are edged with reddish-brown and white: the tertials pale reddish-brown barred with black: lower part of the back, rump, tail-coverts and tail white, barred with black: front of the neck, breast, and thighs, pale orange brown, spotted with black; belly and vent reddish-white; under tail-coverts white, and reddish-brown, barred with black. Legs oil green, tinged with grey: beak greenish grey, and black at the tip: iris dusky. This is the bird in summer plumage. The following describes it in winter:—the chin, cheeks, and streak over the eye, white; between the beak and the eye is a dusky streak; the crown of the head, neck, and upper parts of the breast cinereous,

tinged with brown-ocre; the upper part of the back and scapulars have the centres of the feathers dusky, bordered with grey and brown-ochre. Wing-coverts dusky with paler edges.

The secondaries and tertials are edged and tipped with white; breast and belly white; under tail-coverts and vent white, barred with dusky; rump and tail the same as in the summer plumage. Quills dusky, the shaft of the first white.

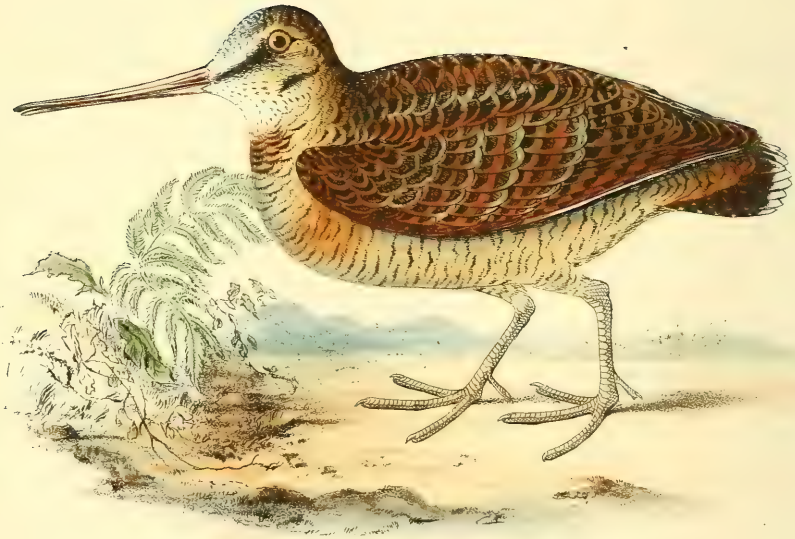


PLATE CXC.

WOODCOCK.

SCOLOPAX RUSTICOLA.

The Woodcock is such a well-known species in Britain as an autumnal visitant, that we only have to name the principal localities where it abounds most, on its arrival. Its geographical distribution extends over most parts of the old world. In Europe it ranges from the borders of the Mediterranean to the highest northern latitudes where trees grow: in most parts of Asia and Africa the Woodcock is found, either as a migratory or periodical visitant.

During the summer months, this species inhabits the northern countries, where it chiefly breeds, and in winter the milder regions of the south. Deviations from this general rule, however, occur in different parts of the south of Europe, where the Woodcock has been found in many instances to inhabit the highest woods of the mountains during the summer, and to come down into the valleys on the approach of winter.

In most counties of Britain the Woodcock is frequently found to breed and rear its young, provided the locality suits its habits, and the spot is retired and little frequented by man, particularly in game preserves. It appears that the bird in question is not able to bear very cold

weather, since it is a rare circumstance to meet with one in the depth of our severe winters, but when the winter is mild, it occurs throughout the shooting-season till the spring. Its susceptibily of cold is, doubtless, not the only reason for the Woodcock forsaking us in severe winters, but its difficulty in finding food must be great when the water is frozen, and the ground rendered impervious to its soft bill when hardened by a continued frost. In this is again seen the wonderful care of Providence, in instilling that instinct into His creatures which enables them to pursue the right road towards finding their food under all gradations of circumstances.

By the end of the month of February, Woodcocks arrive in small numbers from the southern counties, in the midlands and Scotland, but the main body does not appear from the continent before the middle of March, and continues to arrive for about a month ; this is accounted for by the greater distances the latter have come from. It has been frequently remarked, that when the swallows arrive in the spring, there are no more Woodcocks to be expected. The fact that the number of this species is so much greater in some years than in others, is very extraordinary, although the general state of the weather may be the same, and equally suitable ; but this is supposed to depend upon the direction of the wind at the time of its autumnal migration, it being ascertained, that this bird dislikes flying against the wind if it blows hard, and by directing its course south with a side wind, it necessarily passes over a different country, according to circumstances.

It may be useful to remark here, that when the weather is mild during the month of February, the Woodcock is sure to begin to move northward about the middle of that month, and continues to arrive in numbers, and if it freezes

or snows in the beginning of March, this species remains almost stationary until the weather becomes milder again; allowing the sportsman thus a long time to obtain specimens. But when the weather is severe and frosty in February and March, the Woodcock does not start by far so soon, and when it does begin its migration late in March, it hurries over the ground it has to pass, and the entire bulk of them give the sporstman hardly more than a week's diversion; besides which, the bird, by allowing itself scarcely time to feed by the way, is not found much on the ground, and is mostly in bad condition for the table.

The Woodcock always travels during the night, after having previously fed from dusk till dark. These birds travel alone, or at most in pairs, which fact has been disputed by some observers, in consequence of the numbers that are found in certain localities in the morning, after a mild autumnal night.

The woods on the north-east side of the islands along the coast of Denmark, are much frequented by the Woodcock in the autumn, and similar spots may be searched with frequent success in our country, namely the north-east sides of hills covered by copses or woods. It is probable that this bird, being crepuscular in its habits, prefers that aspect, as being mostly sheltered from the obtrusive light of day.

As the name of the present species indicates, the favourite haunts of the Woodcock are woods, but it seems chiefly to frequent the cover of young trees in preference to large forests, since it is only met with in the latter localities during the time of migration, when it will alight in the most unlikely places for a day's rest, after a long flight, such as orchards, hedge-rows, and ditches in open ground.

The reason why the Woodcock at all times seeks for trees on alighting, is only for the purpose of concealment;

as it invariably squats on the ground close to a stem among the foliage, but is never seen perched in a tree. The springy moist spots in the woods where the foliage is close to the ground, or where blackberry-bushes are intermixed with the trees, or where hazel and alders grow, this species seeks invariably, provided the grass is short, void of moss, and the ground covered with plenty of decayed foliage; we do not remember ever to have put up a Woodcock from spots where long dead grasses might be supposed to afford him shelter.

The judgment which birds shew in choosing the locality the best adapted to their wants is in none more perceptible than in the Woodcock. This is so remarkable that during the time of migration a sportsman, if he knows any particular spot in a wood that is frequented by this species, may visit the place several mornings in succession, and he will be pretty sure to find every day a bird. Persons who are unacquainted with this fact, believe that if they do not kill their bird it returns again and again to roost, which after killing the bird and pocketing it one morning, can certainly not be the case the next.

The general appearance of the Woodcock is exceedingly strange and ludicrous, when seen staring from its hiding place, owing to the length of its forehead, the flatness of the head, and the large size of the eyes, that appear as if they lay on the head instead of forming part of its sides; its walk resembles that of a duck more than a snipe, owing to the breadth of its body and the shortness of its legs.

The flight of the Woodcock is slow in comparison to that of all other snipes, but the bird is capable of turning and twisting itself in all manner of ways, which enables it to fly through a plantation of trees with peculiar cleverness, and thereby frequently avoids being shot.

When the Woodcock is pursued or put up by the sportsman, it only flies to a short distance, at no great height, and settles again by the side of some bush or bramble, if it is obliged to leave the shelter of trees; or it starts for a neighbouring copse, provided the distance is not more than six hundred yards; sometimes the bird after leaving a copse, will return again to it, by flying in a circling direction, and will thus deceive the sportsman, who has not marked his bird down.

The Woodcock is very easily known by the peculiar noise of its wings when flushed; not only the sound produced b ytheir rounde d shape, but a pattering, as if the bird touches the boughs and foliage, during its progress through the wood. At night its flight is quicker and higher, and on taking wing of its own accord for the purpose of beginning its journey, it rises at once above the wood, and disappears high in the air.

It is a very remarkable singularity in the Woodcock, that when it flies it invariably holds its beak pointed in a directions towards the ground, so as to form a perfect angle with the line of its back; this position is most probably chosen, that it may have thefull use of its eyes, which are placed almost on the top of it head. In the same position it may be seen standing at rest in cover, with its beak invariably directed towards the ground.

In the autumn and spring of the year, when Woodcocks migrate, they frequently rove about for a quarter of an hour at night and morning, pursuing one another on the wing, snapping at each other, and tumbling about, either at dusk, just before dark, or in the morning until daylight; this amusement or pastime is carried on in open places, avenues, or meadows, at an elevation of from five to fifty feet from the ground, and in Holland the inhabitants avail themselves

of this opportunity of catching Woodcocks by means of thin silk nets, of inch-and-a-half meshes; these are suspended between poles across avenues in parks and pleasure-grounds. These nets being fastened to poles at their lower end, three feet from the ground, are hoisted up by means of a pulley, right and left; to which a small cleft stick is fastened, which is formed like a linen peg, in the slit of which the loop at each top-corner is slightly slipped, so as to fall over the bird as soon as it flies against the net; which entangles the more readily by means of the bullets that are attached to the two top corners of the net. Whether this method would answer in this country where poaching prevails to a greater extent than anywhere else on the face of the globe, is doubtful, but no better mode of obtaining Woodcocks could be devised, and in Holland we have taken numbers in this way.

In its nature the Woodcock is exceedingly timid, and consequently it is never seen flying about during the day-time, unless it has been startled from its hiding-place; under such circumstances it throws itself as soon as possible to the ground, where it remains flat until all danger seems distanced, when it flies again to the cover of trees or brambles; the latter being generally a favourite shelter even in the woods. The colouring of this bird harmonizes so completely with the dead foliage on the ground, or with the roots of trees, that it requires an eye of extraordinary quickness to detect it in its usual seat. The large eyes of the Woodcock are the only means by which the bird can be distinguished when on the ground.

The Woodcock utters several sounds, which are difficult to describe; we shall, however, attempt it; at dark in the evening it repeats a word somewhat like *tseep*, pronounced very lispingly and damped. When flushed, it says *catch*, *catch!* or *dack*, *dack!* expressive of alarm and fear.

The food generally found in the stomach of the Woodcock, consists of the remains of worms, insects and their larvæ, which the bird obtains from under decayed foliage, among roots, and in springy bogs, and also the fibres of roots and bog-plants, but whether these are taken inadvertently with the insects, or sought for with equal relish, cannot be decided. In the darkness of the night the Woodcock visits also the meadows where cattle feed, provided these are close to their natural cover.

The manner in which the Woodcock obtains its food is by turning the decayed matter over with its beak, in lumps of four or five inches in width, and these lumps are generally found perfectly perforated by its beak. The well-informed sportsman can consequently easily find the spot in a wood where the Woodcock is in the habit of feeding, since other birds, such as black-birds and thrushes, do not turn the foliage over in lumps without perfectly pulling it to pieces, neither do they perforate it. Moist boggy ground is in a similar manner bored into, hole beside hole, in its search for worms and bog insects.

The Woodcock is capable of being kept in confinement, and must be fed on worms and bread-and-milk.

The breeding of this species takes place in most parts of north and central Europe, but more particularly in mountain forests, that skirt valleys and border rivers. In May the female seeks a retired spot among moss and long grasses under the shelter of a small bush, or among roots and brambles; she there scratches a hole in the ground, lines it sometimes with a few grasses, at others not at all, and deposits her four eggs in it, which are in size, shape, and colouring as represented in our Plate. It requires seventeen days incubation to hatch the eggs, during which time the bird sits very close. The young run out of the nest as soon as hatched,

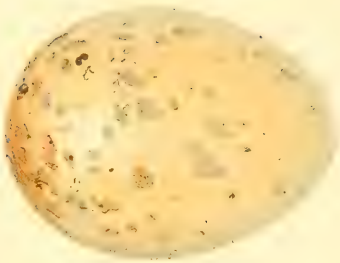
and become nearly full-feathered in three weeks, when they begin to flutter about and desert their parents.

The length of the Woodcock is thirteen inches and three quarters; the beak measures two inches and three quarters; the tarsus one inch four lines and a half; the middle toe one inch and eight lines; the wing, from the carpus to the tip, seven inches ten lines.

The forehead and top of the head are ash-grey tinged with burnt-sienna. The hinder part of the head and nape have four broad, blackish-brown, transverse bars on a rufous ground; from the base of the beak to the eye extends a brownish black mark. The chin is white. On the upper part of the breast are two patches of rufous, which differ in depth of colour in different specimens. The upper parts of the bird are a mixture of brown, black, yellow, and grey, with various markings and pencillings of black, darkest on the back and scapulars. The rump and tail-coverts are pale chestnut, some of the feathers of the coverts are tipped with rufous-white, and transversely barred with black. The tail is black with small brown spots; the tips of the feathers pearl-grey above, and white on the under surface. The quills are dusky with bars of chestnut brown. The adult male has the outer quill-feather only imperfectly barred, the immature and female entirely so. All the under parts are greyish-white tinged with yellow and rufous, and transversely barred with hair-brown pencillings.

Vent and under tail-coverts yellowish white with black triangular central spots. Legs livid flesh-colour tinged with grey; the base of the bill the same, the centre clove-brown and the tip dusky. The iris deep clove-brown.

The egg figured 190 is that of the Woodcock



193.

PLATE CXCI.

SOLITARY SNIPE.

SCOLOPAX MAJOR.

The Solitary or Great Snipe is at present more generally met with in Britain than formerly, or, is at least better known since Pennant pointed out the distinction between this and the common snipe, which latter is the most probable case ; it is not, however, by far so numerous as that species.

The flesh of this bird is in some respects preferable for the table to that of the common snipe, in consequence of its generally being in much better condition as to fat.

The geographical distribution of this species does not extend further north than Sweden in Europe ; neither does it appear far north in Asia nor in America, but extends its winter sojourn over the entire Continent of Europe and greater part of Asia, and in America as far as Brazil.

The locality chiefly sought by this species appears to be low wet meadows and flats, and extensive grassy plains that border lakes and rivers, and that serve more for feeding cattle than for the production of hay, where the ground has, for the most part, been trampled into holes ; in these situations it has still its peculiar spots, namely, where the bright or pale green, rank grasses vegetate, such as the jack-snipe frequents, and which the common snipe does not resort to.

One morning in the autumn when seeking for snipes on Chertsey mead, we came to a similar spot close by the Thames, and where the said rank grass never, to our knowledge, harboured a common snipe; our dog put up two of the present species just at the moment when we had turned away from the river; they were so large that we at first took them to be teals, which are there frequently met with; the ground among this grass is too dry to invite the common snipe to alight, and would, therefore, suit the general taste of the Solitary Snipe better. Unfortunately these two rare birds, by crossing the river immediately, deprived us of the chance of following, and shooting them. The present species is by far less fond of water than the common snipe, only frequenting grass lands that are moist from the effects of dew rising from the neighbouring water; but on drifting or floating bogs it is never found.

The Solitary Snipe, when seen on the ground, stands generally with its beak pointed to the ground, like the woodcock, its neck much shortened, and on straight legs; its walk is easy, but it does not run fast; its flight is not quick, and is performed at a low elevation, and in a straight line. Unless this bird is put up, it does not show itself during the day, but remains quiet among its grassy and uneven shelter, and requires to be started again and again, if the place will allow its being pursued.

When the present species is put up, or when it alights in the dusk of the evening, it does not utter any sound like the common snipe; but it has been remarked by a friend, that where two of these birds meet, they will call once or twice to each other, uttering the word *bad, bad!*

The Solitary Snipe feeds, like others of its family, on worms and insects that are found in the spots generally frequented by them; and in many instances caddis worms, with

their curious cases, are found in their stomachs, and also many grains of sand ; but, contrary to the practice of others of its tribe, this bird is said to cast these cases and other substances in long pellets. Evening is the chief feeding-time of this bird, when it roves about on the muddy grounds by the water's edge.

The present species does not breed further north than Liefland, and frequently in Hanover and Oldenburg ; whether it has occurred in Britain we have not been able to ascertain, although we see no reason why such should not be the case.

The locality, before described, in which the Solitary Snipe is found, is also the place where the nest and eggs are to be looked for in the beginning of May ; the male and female may then be found not far apart on the ground, where they lie so close that they may be knocked down, and on taking wing they very soon settle again close by, alighting on a hillock or grassy knoll, in the midst of the swamp or shallow bog where the young grass is about half a foot high. In preparing her nest, the female presses the grass in the centre somewhat flat, rounds the spot a little, and lines it tolerably well with dry grasses and fragments of herbage ; in it four eggs are deposited by the end of the month of May. After seventeen days' incubation, the young birds run about, and are assisted by the parents in procuring their food for about a month, but are very difficult to find in their secure retreats among bogs and uneven ground.

Not having the egg to figure from, we must remain satisfied for the present with describing it from an account received from good authority.

The length of the egg is twenty-two lines, and its width sixteen ; its shape much resembling that of the black-tailed godwit. Its texture is fine-grained and dull, of a yellow

olive-green. In the body of the shell are several dots and spots of dingy grey, and on the outer surface are many dusky spots of round, oblong, and irregular shapes, that are most plentiful near the larger end.

The Solitary Snipe measures twelve inches and a half in length: its beak two inches and three quarters. The crown of the head is black, with a central line of cream-colour; cheeks, orbits, and throat, white, speckled with dusky; the nape pale rufous, with black spots; back and scapulars black and rufous-brown, the feathers partly edged with straw-colour; greater coverts tipped also with white. All the under parts white, spotted with black and rufous brown. Quills dusky. The tail consists of sixteen feathers, which are barred with black and chestnut; the tips white. Beak dusky at the tip, browner about its middle, and flesh-coloured at the base; legs olivaceous grey.

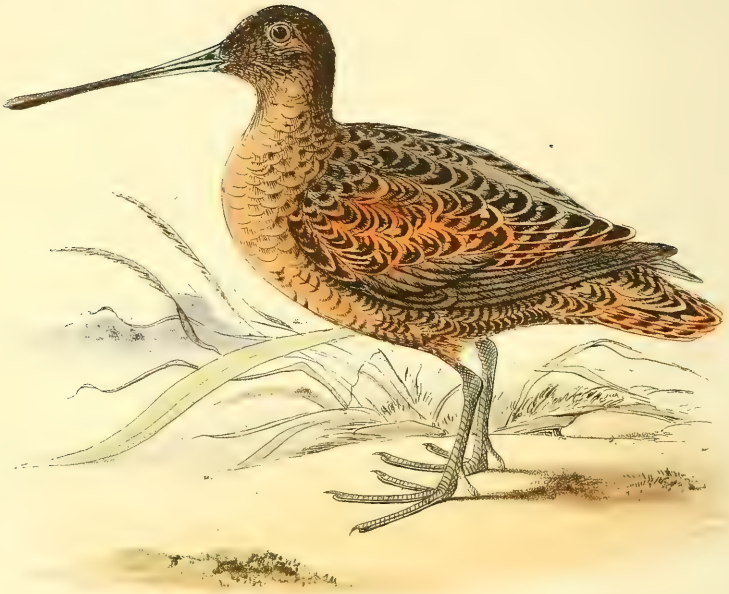


PLATE CXCII.

SABINE'S SNIPE

SCOLOPAX SABINI.

This rare species has occurred in the British islands in only three or four instances that we are acquainted with, from one of which specimens we figured our Plate. We are unable to say where it breeds, or what countries it inhabits, since no continental ornithologist even mentions this bird, nor is there a specimen on record in any continental collection.

The first mention of the bird in question was made by Mr. Vigors, to whom a specimen was forwarded the same day it had been shot in Queen's County, Ireland, in August, 1822, and who has described it in the fourteenth volume of the "Transactions of the Linnæan Society." Mr. Vigors named the bird in honour of the chairman of the Zoological Society of that period.

The measurements of the Sabine's Snipe are nine inches two lines in length; the beak two inches and a half; the tarsus one inch three lines; the wing, from the carpus to the tip, five inches. The entire colouring of the upper plumage is reddish dusky, from the forehead to the rump, the under the same, but paler in tint. The rump is more greyish dusky, as also the vent; some of the wing-coverts, and the sides of

the neck and breast, are tinted with ferruginous-brown, and the tail, which consists of twelve feathers, is ferruginous at its tips. The whole surface of the plumage is spotted and barred with black, as represented in our Plate; the quills are dusky. The beak is dusky, with olivaceous brown at the base; the legs dusky. We find no account of the colour of the eyes when fresh killed, and have coloured them consequently in harmony with those of its family, dusky.

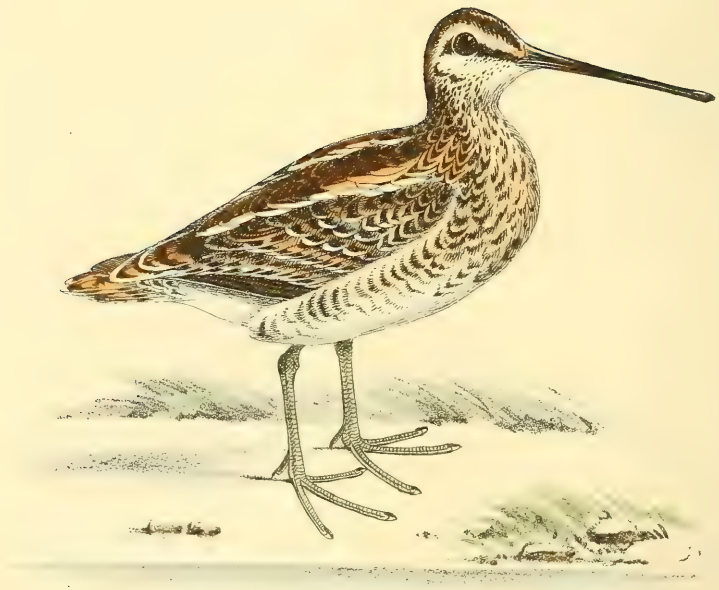


PLATE CXCIII.

SNIPE.

SCOLOPAX GALLINAGO.

The Snipe is one of the most common winter visitants of Great Britain, and occurs in greater numbers than any other game bird. Its geographical distribution is so very general, that it would be a difficult task to name a country where the bird is not known, but, owing to its semi-aquatic nature, it is more numerous in some spots than in others. In some parts of Ireland Snipes meet with such suitable ground, that the numbers dispersed about are almost incredible to persons who have not seen them. In the swampy parts of many counties in England, it is as common to find Snipes in October and March, as sparrows in the farm-yard. In Holland the numbers of this species are also very considerable; but according to accounts that we receive from travellers in India, and officers who have been stationed there, in the service of the East India Company, the numbers there are so immense as to put Europeans entirely out of conceit with the numbers that are ever met with here. The most remarkable circumstance that we ever heard of in England, connected with Snipe shooting, was that of a gentleman at Chertsey, in Surrey, who killed nineteen Snipes at one shot, with a double-barrelled gun, out of a flock that swept over an osier-bed.

The favourite haunts of the Snipe are swampy meadows, interspersed with patches of black mud or peat-bogs. Where the Snipe does not immediately meet with such a spot, it alights in the evening in wet meadows or moist heath-ground on commons, on the grassy banks of ditches, rivers, and ponds, or in osier-beds; and during windy weather particularly, among willow-stumps, felled copse-wood, and even turnip-fields. It is under such circumstances that the sportsman meets with it without going to the dangerous and laborious, though most proper, places.

The food of the Snipe consists in small worms, insects, and vegetable substances; the former of which it obtains by boring the moist ground of its usual abode with its long and slender beak.

The locality chosen by the Snipe affords it also every necessary for breeding. The nest is usually placed under the shelter of decayed tall grasses, and consists in a shallow hole scratched in the ground, which the bird lines with a few dry bents and stalks of heath or bog-plants; in it four eggs are deposited, which are in colour and size like that represented in our Plate. The young leave the nest as soon as they are hatched, and are under the care of the parents until they are able to provide for themselves.

The usual mode of obtaining Snipes is by shooting them when on the wing, going in pursuit of them with a good pointer dog. The value of Snipes in the market is not sufficient to make a trade of obtaining them, although great numbers are brought to market from localities where idle gunners are enabled to kill numbers in one day; neither is it a pastime for persons who are not fond of continually wading in bogs, or walking over uneven ground, where it becomes very laborious to keep one's footing (these being the most proper places to meet with the game in question). The re-

quisites for a Snipe-shooter are,—a good pair of water boots, a staunch pointer, which hunts close and steadily, carries quick, and lies down while the gun is reloaded, and finally, a perfectly clean gun, No. 8 shot, and dry powder. Thus equipped, the dexterity and good aim of the sportsman may get a dozen or twenty Snipes in one spot, provided he travels slowly over the ground, and keeps cool and collected.

In Snipe-shooting, the weather is also to be taken into consideration, which we will here notice for the information of such of our readers as cannot entirely give up their time to choose any day in particular. When the day is windy, the Snipes are very wild, and get up before any one can reach their station; under these circumstances the sportsman must walk his game up with the wind, particularly as the bird rises by preference against it, because in this case the Snipe, getting up, will either have to encounter that obstruction, and be thus retarded in its flight, or will fly sideways, remaining within the first distance of the sportsman for a sufficient time to give another chance.

Rainy weather is the worst time of all to go in pursuit of Snipes, in consequence of the very unpleasant fact that the sportsman receives the watery element not only from below in greater quantity, but from above, and the birds besides do not lie so close. Clear, mild, and still weather is the most proper and pleasant; when the sportsman travels step by step over the uneven ground, picking his way leisurely, and being at all times prepared to level his gun without having to consider other difficulties; he can then watch his dog closely, and follow him uninterruptedly, either straight forward or to the right or left, so that when a point is made, or the Snipe gets up close to him, he is as near as is necessary to kill it. In order to gain this latter point, the sportsman must be quick at aiming, and very collected; but practice alone can

teach the art of doing this instantaneously, namely, aiming and firing with precision and without loss of time. Should he be hurried, and consequently miss once or twice, it is best to go and sit down for a time, and then begin again fresh and collected, with a cool determination of killing the next. This last advice is not to be forgotten under any circumstances, whether at snipe or partridge shooting, for the humour, state of mind, nervousness, or slight indisposition of body, or over-anxiety to obtain game, will undoubtedly tend to spoil a day's sport greatly.

In looking for Snipes one must, as it were, sneak along, without splashing in the mud, or talking to a companion, or even to a dog; and though several Snipes should get up out of shot, he must steadily continue his course, for in most instances some birds remain on the ground, which will only get up singly.

When the sportsman has killed his bird, he must reload immediately, before picking up his game, if he goes without a dog; for between him and his prize there may be more Snipes lying concealed, and they might be secured also. The Snipe must either be fired at the instant he gets up, or the pulling of the trigger must be delayed, until the zigzag flight of the bird is past, and he commences his straight forward departure. This latter chance is uncertain, in consequence of the distance the bird has gained, but while the right and left movement goes on, there is no calculating upon killing a Snipe. In the beginning of the autumn the Snipe is more difficult to shoot than in the winter, owing to its evolutions to the right and left on taking wing.

A good Snipe-shot may kill from seventy to eighty in a day with a single gun, and it has been said that some have even brought down a hundred under favourable circumstances.

One mode of walking Snipes up is, by making a screen of thin twigs and flags, the sportsman advancing very slowly with it before him; there must of course be an opening left in the screen to look through, and the screen must be large enough to hide the person from head to foot. Under these circumstances half a charge of powder and shot is quite sufficient to kill the bird on the ground. Many inventions are resorted to in order to catch Snipes in horse-hair springes, most of which are next to useless; the best of them known to us is by treading a narrow path along the side of a bog, and sticking right and left a row of green osiers or flags in the ground, so as to form an avenue in miniature; all along the inside of this avenue horse-hair nooses must be suspended, and some laid down on the ground, in which the Snipes are pretty certain to be caught when they run along this shelter, which they are sure to take advantage of in such open localities. On the aits in the Thames we know that the fishermen catch Snipes by fastening horse-hair nooses to a peg which is stuck in the ground in spots where the Snipes are known to come and feed at night; we have ourselves had several Snipes brought to us alive that were thus obtained, and have no doubt that it is as good a mode as can be put in practice.

Many persons watch for Snipes in the evening near spots where they come to feed, but this proceeding is uncertain of success, and attended with some danger from the unwholesome air of such spots, unless the weather is very mild and fine. We have seen one of the fishermen on the Thames take a low stool to sit upon, watching for Snipes in the evening; and this plan has a double advantage in bringing one's sight close to the ground, since the Snipes, coming down to a pool, must be fired at the instant they alight, after which it is impossible to see them in the dusk. We have ourselves

put this method of watching for them in practice, in order to observe the habits of the birds in question.

We believe that most practised sportsmen know the locality where Snipes are to be looked for, but it may be as well to add a short notice on this subject for the use of the inexperienced.

In our latitude, Snipes arrive twice in the year; first in the month of March, on their way northward, where they breed; and again in September and October, on their course southward, to pass the winter. It is not exactly known how far south the Snipe migrates to pass the winter, but it is a well known fact, that in the Pontine marshes near Rome, the number congregated during the winter months exceeds all conception, which eye-witnesses have proved by firing a gun near the spot, when so many Snipes get up as to form as it were a cloud of smoke rising, of the numbers composing which, it is impossible to make any statement or calculation. The unsociable nature of the Snipe is here clearly proved, insomuch as that these birds will lie close beside one another without taking notice of their neighbours, and when they rise in a body, each takes its own way, and settles far or near according to its fancy, without caring what becomes of the rest. After a time, single birds are seen again to return to the spot.

This latter propensity enables a person, who waits for them in the evening, to kill a Snipe and return to his post over and over again, waiting for the next comer. Where the number of any species of birds is so great during the time of migration, many travel the same road, and a circumstance, as before-mentioned, of a person killing so many at one shot is possible under particular circumstances, although not of frequent occurrence. The Snipe always travels at night; the first sign of its vicinity is its peculiar note, and almost im-

mediately the splash on the wet ground is heard, for the Snipe, when it means to alight, drops itself down like a falling stone. All moist, boggy, and swampy meadows, intersected with drains, ditches, hollows or broken ground, banks of rivers, ponds, or canals, suit the taste and habits of the Snipe. Where the grass is long enough for cover, or where decayed flags and rushes abound, the Snipe generally remains concealed during the day, but where these wet places are only covered by short vegetation, and afford no shelter, there is not much chance of finding these travellers.

When frost sets in sufficiently to close the water, the Snipe resorts to commons where the vegetation shelters the springy bogs from being entirely frozen over. During boisterous weather, the Snipe resorts to the shelter of stumps and underwood along ditches and pools, and to furze-covered commons. When still thaw-weather sets in, after a long frost, there is hardly a spot among its favourite localities where the Snipe is not to be found, and consequently a day when the snow melts, and the ground is what we should call exceedingly uninviting to walk out, is most excellent for going out Snipe-shooting. Boggy ground, which only appears as if it would bear a person, but which actually fails even under the weight of a dog, is the most proper resting-place of Snipes, but as such places cannot generally be traversed, the above-named localities are the most advisable for a sportsman to go in search of. In the spring of the year the Snipes come to us with a southerly wind, and in the autumn with a northerly, north-easterly, or north-westerly wind.

It is very well for the sportsman that the Snipe is so tender that the least thing brings it to the ground; and although this is well-known, we will give a proof of it, by the fact, that when out Snipe-shooting in Holland, with a

relative who was able to give us many a good day's sport, owing to his being at the head of this branch of the management of Woods and Forests, we have killed great numbers of Snipes during the day, and at the end of our day's work, on emptying our pockets, it frequently occurred that two or three birds flew away, as if nothing had happened to them; these birds could consequently only have been stunned by the blow of a single shot.

The entire length of the Snipe is eleven inches and a half; beak two inches ten lines; the tarsus one inch two lines.

The top of the head, back, and scapulars are black, streaked with chestnut and yellow ochre; wing-coverts dusky, with edges of cream white; the quills are black. The chin and throat are white; the sides of the face, neck, and upper part of the breast are spotted with dusky-grey; and tinged with ferruginous brown; and this latter colour indicates the time of the year when the bird was killed more than anything else. In autumn and winter, the rufous colour predominates, and in the spring, the ground colour of these parts is pure white; on the thighs are numerous dusky bars; the lower part of the breast, the belly, and vent, are white. The tail is black, with bright ferruginous bars; the tips of the feathers are white; the beak is dark clove-brown, and dusky at the tip; its base is flesh-red. The colour of the legs are pearl-grey, tinged with green. The eye is dusky.

The egg figured 193 is that of the Snipe.

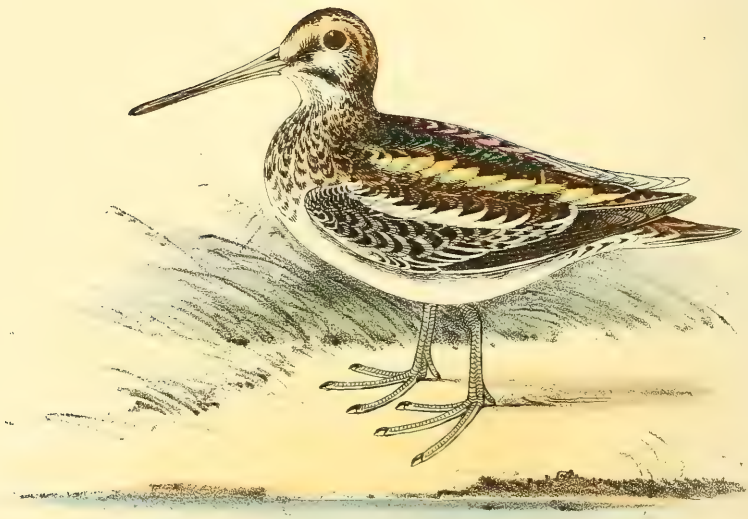


PLATE CXCIV.

JACK SNIPE.

SCOLOPAX GALLINULA.

The Jack Snipe is of frequent occurrence in Britain, wherever the locality suits its habits; this bird is also met with in most parts of Europe, Northern Asia, Africa, and America; its habits being more solitary than those of the Common Snipe, it is nowhere, to our knowledge, known to congregate in numbers. Although we have gone in search of Snipes in several parts of Europe, we have never put up more than one bird of this species at a time, although two frequently may be found within from fifty to a hundred yards apart.

The localities frequented by the present species are swampy borders of rivers, lakes, and ditches that are covered with rank grasses, extending some way in the water; among the shelter of this herbage the Jack Snipe lies very close, even to a remarkable degree. The fact that we meet with the Jack Snipe earlier in the autumn, and later in the spring of the year than the common Snipe, strengthens the information we have received, and which also corresponds with our own opinion, that it does not migrate so far north for the purpose of breeding, as the foregoing species. It has very rarely happened that we have seen the common Snipe in autumn,

until we have killed several of the present species; and as the Jack Snipe is by far more exclusively attached to particular situations than any other of its family, we invariably pay certain spots in our neighbourhood an annual visit, in order that we may ascertain if there is a chance of finding Snipes. About the second or third week in September, the Jack Snipe is usually at its post, and from a week to a fortnight after that time the common Snipe is heard towards the evening to alight in the wet meadows and ditches.

The Jack Snipe travels during the night, feeds early and late, and roosts or sleeps during the day.

The general appearance of the Jack Snipe when walking on the ground, is hardly possible to describe, since we have never seen one of these beautiful creatures on its legs, but invariably lying close to the ground; its flight is not by far so swift as that of the common Snipe, is very unsteady, and most of all resembling that of the bat, as it rolls about from side to side, fluttering its wings irregularly. A sportsman going in pursuit of the Jack Snipe, requires some practice to make sure of the bird, and ought not to be in a hurry to fire at it before he marks the direction the bird intends to take when at a certain height from the ground. It affords some merriment to see an inexperienced hand meet with a Jack Snipe, as the bird is not easily shot, and settles generally close to the spot it has left; thus the unpractised sportsman fires a good many shots at the same bird before he obtains it.

The food of the bird in question consists in aquatic insects, larvæ, and small worms, for which it bores the mud, or soft wet sand.

Respecting the breeding of the Jack Snipe we know very little, as the bird is rarely met with during the summer months; we are informed, however, that great numbers

annually breed in Liefland and Finland, making a nest on a grassy knoll like the common Snipe, and laying four eggs, which are in size and colour as represented in our plate.

The entire length of the Jack Snipe is eight inches six lines; the beak measures an inch and three-quarters. The crown of the head is black, the feathers edged with rufous brown. From the beak extends a cream-coloured band over the eye, down the nape. Between the beak and eye is a space of wood-brown. The cheeks white, with the tips of the feathers black, forming a mixture of middle tint. The throat is white; lower part of the neck and the breast wood-brown, tinged with grey, and spotted with dusky. The back and inner webs of the scapulars black, reflecting olive and purple; the scapular feathers are long and narrow, and their outer webs are of a rich cream yellow, thereby producing two bands of that colour down the back. The wing-coverts are black, the feathers edged with wood-brown and white. The tail is dusky, edged with very pale rufous. Belly and vent white. The legs and toes are pearl grey, with a greenish tinge. The beak is dusky, darkest at the tip, and flesh-coloured at the base, with a bloom of grey. The eye is dusky.

The egg figured 194 is that of the Jack Snipe.

PLATE CXCV.

RUFF.

MACHETES PUGNAX.

The Ruff and Reeve, as the male and female of this species are called, are among the most extraordinary of all known species of the feathered tribes, principally on account of the endless variety of plumage and colouring that they present; and we consider this also one of the most bewildering species for a young naturalist to meet with. We have had a great number of males, females, and young birds at the same time brought to us, but not two resembled each other either in plumage or colouring of legs, beaks, or orbits, nor were alike in size. In Britain the species is well known, and annually seen in its proper locality, chiefly in Norfolk and Lincolnshire. In Holland greater numbers congregate than in any other part of Europe, although the species is very generally distributed over Europe, Asia, and Africa, even as far as the Cape of Good Hope.

The Ruff is a migratory bird, passing the winter in milder regions than our own, and returning in the spring of the year to breed, as well here as further northward, yet not beyond central Norway in Europe, or Siberia in Asia.

The locality inhabited by the Ruff is wet marshy tracts, where their peculiar courtship is annually exhibited in the following manner. By the end of April or beginning of May, several Ruffs choose, each for himself, a stand on an elevated spot on the boggy ground at a little distance from the rest, and on the arrival of a Reeve (the female) the champions all begin to fight until the victor carries off the bride. These scenes may be witnessed day after day during the months of April and May. The nest is placed on a grassy lump in the moist swampy part of the neighbourhood, and four eggs as represented in our plate are deposited in it. By the end of August the young are fully fledged, and congregate in September to depart for their winter quarters in company with the old females; the male birds migrate by themselves in flocks, and are said to live sociably and peaceably through the winter; they depart some days earlier than the females and young birds, to return in the same order in the spring of the year.

The food of the Ruff is worms and aquatic insects, which it finds in abundance in its usual abode.

The Ruff is not a shy bird, and can easily be kept in confinement. In the fenny districts of Lincolnshire, numbers are annually caught alive by means of folding nets; and this is also practised in Holland. In order to entice the birds to the spot, call-birds, or stuffed birds are disposed in various parts of the ground, and when new ones are captured, they are caged and fattened for the markets. Fortunately, for the good of the bird-catchers, the Ruff invariably feeds well on bread and milk, steeped grain, and fig-dust or barley-meal, which improves the condition and fattens the bird fast; its flesh is greatly prized by many.

The measurements of the Ruff are as follows:—entire

length of the bird twelve inches and a half; beak one inch and a half; tarsus one inch two lines, tail two inches eight lines, wing, from the carpus to the tip, seven inches and a half.

The adult male in the spring or breeding season has two tufts of elongated feathers on the head and a ruff of elongated feathers around the neck, which stand very conspicuously erect, especially during the excitement of their daily battles.

The colouring of these feathers varies in each individual from white, yellow, and rufous, barred with black, to black with metallic reflexions; sides of the breast and thighs are pale reddish-brown, barred with black, or entirely black. The middle of the belly, vent, and under tail-coverts are white. The four middle tail-feathers are barred with black; the remainder of one and the same colour: quills dusky. The sides of the face from the gape above and below the eyes are covered with orange-coloured warty tubercles. The beak and legs are bright orange-red. The eyes hazel.

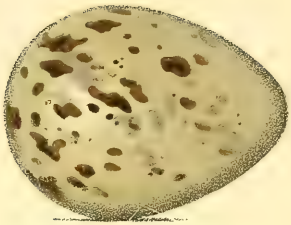
The male in autumn and winter has none of the elongated feathers about the head or neck. The under parts, from the throat to the vent, are white in some, and in others spotted with black, or black with white bars; the breast rufous with darker brown spots. The upper parts vary in every individual. The beak and legs are raw-umber-brown.

The female, or Reeve, has never any crest or elongated feathers about her neck; the upper parts are cinereous-brown, chequered with black, that reflects rich steel-blue; the under parts the same, but many tints lighter; belly and vent white; the beak is dusky, or black, the legs wine-yellow.

The young of the year resemble the females, but have

a tint of reddish-grey about the breast, and a general dusky colouring over the upper parts, where the feathers are edged with pale rust-colour; the under parts are white; the beak is black, and the legs and feet oil-green.

The egg figured 195 is that of the Ruff.



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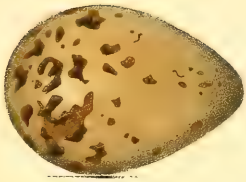

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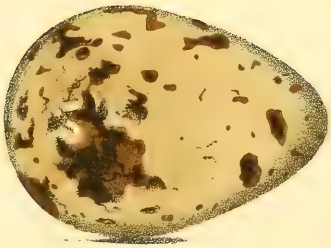

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PLATE CXCVI

KNOT.

TRINGA CANUTUS.

The Knot is a migratory species in this country; it visits Great Britain early in the autumn, and remains with us during the winter until the month of May, when it departs for the higher latitudes of the northern hemisphere, to breed and bring up its young. During its stay with us, the Knot inhabits the coast in considerable numbers, sufficient to enable the different markets to obtain a certain supply; its flesh is considered by many to be a delicacy.

Besides the maritime countries of Europe, the Knot is also found during the autumn and winter months in Asia and America; but in countries distant from the sea it occurs but seldom. In the summer, the Knot inhabits the arctic regions.

The habits of the Knot are much in unison with those of others of its family, but its short legs and greater plumpness give it a peculiar appearance, and easily distinguish it at a single glance from them.

The Knot is a very nimble bird when on the ground, and its flight is performed with great quickness, and without much apparent exertion; thus it advances in a straight

line, on strong wings, with regular strokes, generally not more than a few feet above the surface of the ground or water. The present species is not very shy, and may easily be approached within gun-shot, provided it is not frequently disturbed; on its arrival in the autumn, it is indeed so unwary, that when a shot is fired into a flock of them with fatal effect, the survivors on the sands rise in a body, and, after circling round about, frequently alight again among their slaughtered companions. In former times, Knots were captured by means of nets, like those used for ruffs at present, and the birds were kept in confinement and fed plentifully, in order to improve their condition. This proves that the bird may be kept in confinement; and we think it strange that advantage has never been taken of this, in order to obtain a specimen of an egg of this bird, which is hitherto unknown to European ornithologists. The call-note uttered by the Knot is a sharp, high-toned *twee! twee!* well known to persons residing near the sea-coast, and most frequently uttered in the spring of the year, when a flock of the birds take wing. Its food consists of aquatic insects, small worms, and the larvæ of most insects, which it searches for early and late in the day, and during moonlight nights. During the daytime, the Knot roosts, or goes about lazily. When in confinement, this species readily consumes bread and milk, with small worms, or finely-chopped raw meat.

Concerning the propagation of the Knot, nothing is satisfactorily known, if we except a statement of Dr. Richardson, who informs us that it breeds in the Hudson's Bay, where its four eggs are deposited on a bare tuft of withered grass.

The Knot measures ten inches in length.

The summer plumage of the adult male is of a uniform

orange-coloured brown on the throat, sides, and fore-part of the neck, breast, and belly; where the light shines upon the breast it reflects a rose-copper. Top of the head, nape, and hinder part of the neck, orange-brown, with black streaks, and a few small white spots. The back and the scapulars are black, barred and marked with orange-brown; the edges of the feathers mostly white; rump, and upper tail-coverts barred with black, white, and orange-brown. Tail-feathers dusky, with rust-coloured edges; the beak and legs are bluish-black; the shafts of the feathers are white; iris dusky.

There is no difference in the plumage of the male and female, unless closely compared together, when that of the male bird will be found to be the brightest.

The adult in winter has a very different appearance, the top of its head being of a brownish grey, with the shafts of the feathers darker; this colour extends over the neck, back, scapulars, and wing-coverts; the latter being tipped with white, form a white bar on the wing; between the beak and the eye is a dusky streak, and a white streak over the eye. The forehead, throat, and all the under parts are white; the sides of the neck and front are streaked with wood-brown; the breast and flanks transversely barred with the same. The rump and upper tail-coverts white, and barred with black in crescent-shaped figures; tail-feathers cinereous, with white edges. Beak and legs blackish-grey; iris dusky.

PLATE CXCVII.

BUFF-BREASTED SANDPIPER.

TRINGA RUFESCENS.

The Buff-breasted Sandpiper was first brought into notice as a visitor in Britain by Mr. Yarrell, from a specimen shot in the month of September 1826, in the parish of Melbourne, in Cambridgeshire, from among a flock of the common dotterels, with which it is supposed to have come from its breeding-place in the Polar regions. Since that period, several specimens have been obtained, although only as solitary birds. In America this bird is more plentiful, and we are informed that it is not uncommon in the Boston markets.

Very little is known of the habits of the Buff-breasted Sandpiper; the localities it frequents are the banks of rivers or the sea-shore; its food, from observations made on the contents of its stomach, seems to consist of insects, both aquatic and others, among which rank the grasshopper and small worms.

In consequence of the Buff-breasted Sandpiper having been found to inhabit the Arctic circle during our summer months, it is supposed to breed there, but passes the

winter season principally in the warmer parts of the continent of America as far south as the Brazils.

The measurements of the bird before us are as follows: from the tip of the beak to the extremity of the middle tail-feathers its length is nearly eight inches; from the carpus to the tip of the wing five inches three lines; the beak measures nine lines to the forehead, and one inch to the gape; the tarsus measures one inch two lines; the naked part of the tibia six lines.

The British-killed specimen, from which our drawing was made, bore the following plumage: all the upper plumage and upper part of the breast are, as its name indicates, of a beautiful buff colour, the rest of the under parts being only slightly tinged with the same; from the forehead over the top of the head, reaching as far as the eyes and ear-coverts, the centres of the feathers are dusky, thereby forming a beautiful appearance of regular rows of scales. The back and sides of the neck, and the sides and front of the breast, are spotted with dusky in a much smaller degree, owing to the lesser extent of that colour on each feather.

The feathers on the back, scapulars, and tertials are dusky in the shafts and inner ring of the borders, with a diffusion of that colour in a lighter degree; the edges of these feathers are white. The lesser wing-coverts are dusky, with buff-coloured edges; the larger wing-coverts more broadly edged with dusky, in consequence of which the wing has a dusky band across when the wings are closed. From the carpus to the tip of the spurious wing the feathers on the ridge of the wing are broadly edged with white; the quill and tail-feathers are dusky, edged with white; the rump and upper tail-coverts are barred with dusky and buff; vent and under tail-coverts finely marked with black

on the shafts of the feathers. The beak is dusky; the legs olivaceous-brown; claws dusky; iris dusky; the under surface of the quill-feathers silvery white, finely rayed in a transverse direction with black; the shafts of the same are white.

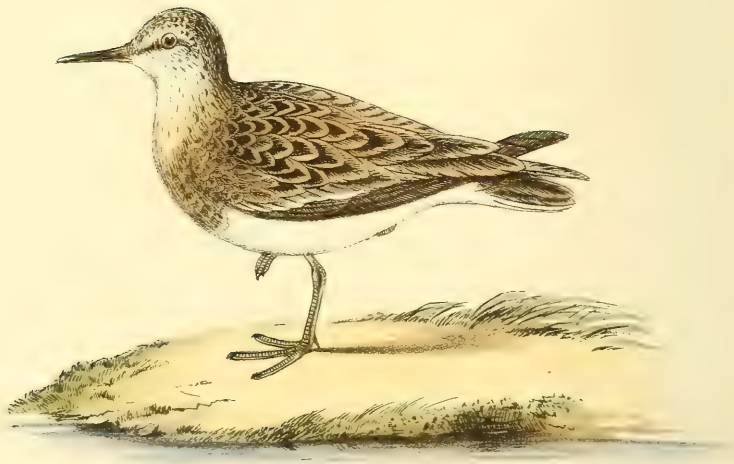


PLATE CXCVIII.

TEMMINCK'S STINT.

TRINGA TEMMINCKII.

This species, the smallest of the Stints that visit Great Britain, has been named after Temminck, in compliment to his having proved it to be a distinct species from what is called the Little Stint (*Tringa minuta*).

Temminck's Stint is an occasional visitant with us during its spring and autumnal migrations. Its native regions are the north and north-easterly parts of Europe and Asia, as far as Siberia; most plentiful in the northern provinces of Russia, where it is said to breed. During the winter it resides in the south of Europe and Asia, and extends over the northern parts of Africa. The locality chosen by the present species is the border of some lake, river, pond, or salt-marsh. In the spring of the year, Temminck's Stint does not migrate northward earlier than the latter end of May or June, and returns again about the middle of August; its migrations are performed during the night, in small companies, or in the suite of other Tringas. We are induced to conclude, from the foregoing observations, that Temminck's Stint is rather sensible of cold, and sociable in its nature. Like most others of its family, the Temminck's Stint prefers nooks and corners by the water side, where the form

of the ground has harboured soft mud and small pebbles, which places generally abound with small insects, worms and their larvæ, flies, gnats, and minute beetles; in its stomach is generally a considerable accumulation of sand as well as vegetable matter. It also frequents the sea-coast, where the ground is soft and muddy.

The exertions, morning and evening, of this elegant bird in pursuit of its food are quite indefatigable; during that time it runs about on high legs, with its body in a horizontal direction, and its beak pointed towards the ground. During the middle of the day the bird rests and sleeps, and when it is surprised it does not even fly away, but remains stationary until forced to leave the spot, and then flies or skims away close over the surface of the water at a rate equal to that of a snipe. It is indeed very extraordinary how this little creature can keep up with the largest of the sandpipers, not only on the wing, but also on the ground; it proves at least that its motions must be exceedingly quick. The Temminck's Stint has another peculiarity, namely, when in company with other species it acts in unison with them, for it is shy when its companions are shy, or tame when they are tame. When it is alone, the bird is not shy, unless it has been put up several times. We have already said that the present species is sociable, and prefers the society of its own species, as they are generally found on the borders of the Baltic and the Caspian Sea, in numbers of from ten to forty or fifty.

The call-note of the present species sounds very much like shaking a bunch of small keys, or may be expressed in the word *tirrr*, *tirrr!*

Respecting the reproduction of the species, very little is known, and that only from hearsay, consequently not much to be depended upon; the greatest probability is, that Tem-

minck's Stint breeds in the northern provinces of Russia and in Siberia, and that its diminutive size has hitherto prevented the few naturalists that, comparatively, have visited those colder climates, from noticing it; and besides, they meet with difficulties and inconveniences that are unknown to the general collector of eggs, we must therefore make a due allowance for them, and live in the hope that we may, sooner or later, obtain the required information on this subject.

We have already said that Temminck's Stint is the smallest of our sandpipers, but this remark will be found to be more to the point, as respects some of the generic and characteristic parts, than in the entire circumference or bulk of the individual when standing on its legs.

The entire length of Temminck's Stint is five inches nine lines; wing, from the carpus to the tip, three inches nine lines; the beak, from the forehead to the tip, eight lines; the tarsus eight lines and a half, being two lines shorter than in the Little Stint, and the middle toe eight lines. The first and second quill-feathers are of equal length, and the longest in the wing. The weight of this species is six drachms.

The plumage of the adult bird in summer is as follows:— all the upper parts, from the forehead down the neck, back, scapulars, and tertials, are ferruginous, with broad black angular centres to the feathers; the forehead, ear-coverts, sides of the neck and breast, are cinereous red-brown, with very small longitudinal black streaks and spots; the tail-feathers are white, with the exception of the two middle ones, these are dusky, with red-brown edges; the belly and all the rest of the under parts are pure white; the lesser wing-coverts are dusky, with paler edges; the greater with white tips, thus forming a white band across the wing; the quills are dusky. The beak is dusky at the tip, and brown at the base, the legs olivaceous-brown, the iris hazel.

The winter plumage, in which our drawing is represented, is as follows :—the upper part of the head, nape, back of the neck, and back, as well as the scapulars, wing-coverts, and tertials, are bistre-coloured brown, with dusky markings on the shafts of the feathers; the throat and streak over the eye white, as also the belly, vent, and under tail-coverts. The tips of the greater wing-coverts being white, form a band across the wing; the sides of the neck and the breast are cinereous bistre-brown, the same as the four middle tail-feathers; the two outer tail-feathers are cream-white. The beak is dusky, the legs olivaceous-brown, the iris dusky.

The young bird of the year has a general colouring of cinereous brown on the upper parts, but the feathers are marked with a double edging of dusky and cream colour; and although the chin is white, and the belly, vent, and under tail-coverts the same, the white is soiled.

It should here also be remarked, that the tail, of which the two middle feathers are the longest, is cuneiform, in which it differs widely from the Little Stint.

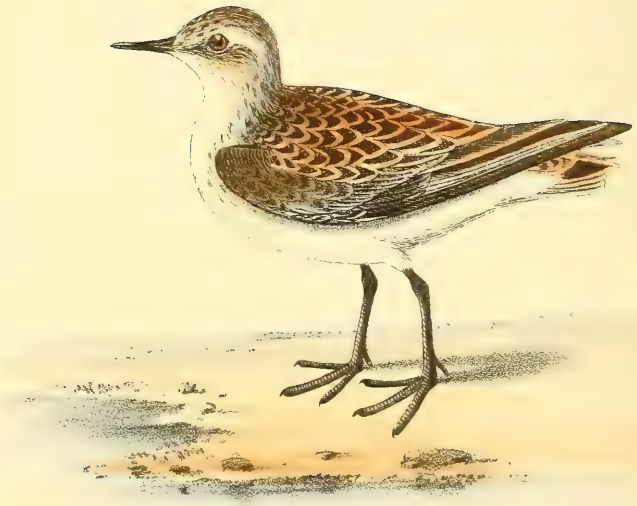


PLATE CXCIX.

LITTLE STINT.

TRINGA MINUTA.

The Little Stint is, in Britain, an autumnal visitant, at which season it frequents the muddy shores of rivers, either in small flocks or in the company of other sandpipers; in the spring of the year this bird revisits us again on its way to the north of Europe, in which region it is supposed to breed.

The geographical distribution of the Little Stint is rather comprehensive, extending all over Europe from north to south, from the northern parts of Asia to Bengal, and is found in Africa from the Mediterranean southward, as far as the equator.

In many countries the Little Stint is found in great numbers during its periodical wanderings, particularly where the muddy banks of rivers and lakes suit its habits, or where large tracts of exposed muddy flats extend. Sandy ground or cover of long grass, reeds, trees, and osier beds are very rarely frequented by this bird. Specimens obtained in Britain are, usually, either young birds of the year, or adult birds in winter plumage; yet some few individuals in summer plumage have been killed and preserved.

The food of the Little Stint consists in small insects and worms, which it obtains from the muddy surface of the flats it inhabits.

The general appearance of the Little Stint is very peculiar, owing to the great contrast of its upper and under plumage: the pure white of the under plumage and the rich dusky brown of the upper parts, occasion the bird to become a marked object both on the ground and on the wing; its longer legs distinguish it, besides, at all times from the former species (Temminck's Stint). Its habits are sociable towards its own species as well as towards others of its family, in so far that it associates frequently with Temminck's Stint, the buff-breasted sandpiper, the purre and the sanderlings.

It is by no means difficult to approach the Little Stint within gun shot, and the most proper time to go in search of it is from ten till two o'clock in the day, during which time it generally sleeps: as soon as the bird is surprised it runs a little distance very quickly, and then takes wing. The flight of this species is much like that of the other Sandpipers, quick, but rather unsteady, and with arched wings. When the Little Stint intends to fly but a short distance, it only skims the surface, but on leaving the neighbourhood it rises high in the air and quickly disappears.

The note uttered by the Little Stint sounds like the word *dear*, *dear!* pronounced in a high tone. Owing to the sociable nature of this bird, it is a very easy matter to keep it in confinement; under such circumstances it must be fed at first with small worms and bread and milk, under which treatment it soon becomes satisfied with artificial food, such as the universal paste of Bechstein, &c.

Respecting the reproduction of the species nothing is satisfactorily known, but it is supposed to breed in the arctic regions. While we were engaged in publishing the quarto edition of British Birds, Mr. Yarrell very obligingly lent us an egg to figure from, as the egg of the present species; the peculiar shape as well as colouring of this specimen

are very remarkable, but we are surprised that Mr. Yarrell has made no mention of this egg in his own history of British Birds, since he had it in his collection: and must therefore conclude that he has since had reason to entertain some doubts of its authenticity. We represent the same egg, numbered 199, in the present work, but, owing to its great rarity and the circumstances alluded to, we cannot absolutely say that this is the egg of the Little Stint.

The measurements of the Little Stint are as follows:— length, from the tip of the beak to the extremity of the tail, six inches; the beak eight lines, and the tarsus full ten lines.

The adult Little Stint in summer plumage has the top of the head black, with rufous-brown edges to the feathers; the forehead and streak over the eyes are buff-coloured; the chin and throat are white; the sides of the neck and breast pale rufous, with brown spots; lower part of the breast, belly, and vent pure white; the cheeks are tinged with rufous and spotted with dusky brown; the back, scapulars, wing-coverts, rump, and two middle tail-feathers are black, and one and all broadly edged with rufous-brown; the outer tail-feathers are cinereous-brown, with lighter edges; the beak and legs are black; the eyes dusky. This is the state of plumage represented in our plate.

The winter plumage differs very much from the above, and is the one in which the bird is more generally known in this country. In this state of plumage all the upper parts are cinereous wood-brown, with dusky shafts to the feathers; between the beak and the eye is a wood-brown streak; over the eye extends a whitish line; the sides of the breast are ash-coloured, tinged with wood-brown; throat, breast, belly, vent, and under tail-coverts white; the two middle tail-feathers are brown, the outer cinereous-brown, with white edges.

PLATE CC.

PURPLE SANDPIPER.

TRINGA MARITIMA.

The Purple Sandpiper is frequently found on the shores of Great Britain, during the winter months, in localities that suit its habits. Its geographical distribution extends over most northern countries, such as the Hudson's Bay, Greenland, Iceland, Norway, and the Faroe Islands. The present species is more a northern and north-western bird than a north-eastern one, and is found to extend its summer migration to higher northern latitudes than any others of its family. During the periods of migration the Purple Sandpiper is very frequently found on some parts of the Mediterranean, and particularly on the coast of Genoa, but about inland seas and rivers it is an exceedingly rare occurrence to see one at any time of the year.

The locality preferred by the Purple Sandpiper is a rocky sea-coast, but the bird is occasionally known to pass the winter in considerable numbers on the southern coasts of England and Holland.

About the middle of the month of April the Purple Sandpipers migrate northward to breed, and return again about September in flocks of thirty or more. It is very remarkable that the bird in question should shew exclu-

sive preference to rocky and stony ground to so great an extent as it does, which is sufficiently proved by the great numbers that frequent such localities, and more so by a circumstance which has brought so many of this species to the coast of Holland, where it was not known to be found before, namely, the erection of those strong and gigantic breakwaters which were constructed in order to save that part of North Holland from the fury of the waves and high floods. We allude to the sluices of Kattwyck, on the masonry of which the Purple Sandpipers are sure to be found during their residence in that country. Great numbers are also found on the rocky coasts of Scotland as well as England and Wales, and some visit Ireland.

The purple colouring of the present species is a peculiar and distinguishing mark, by which the naturalist distinguishes the Purple Sandpiper at a single glance, where it is present; and its manners are almost equally peculiar and amusing to the observer; for the bird runs with the greatest ease and rapidity over the rocky ground, alternately retiring in order to escape the force of the rolling wave, and again following the receding waters very closely, in pursuit of the animalculine matter that happens to be washed up, so as to overtake it before it has time to escape. The long toes and sharp arched claws of the bird enable it to perform its motions on the slippery stones with ease and security. The Purple Sandpiper has been thought to be afraid of wetting itself, and seeking for that reason raised stony objects for alighting, but this notion can hardly be reasonable, as the bird is frequently seen to alight on the water, and to swim with apparent ease, and its plumage also seems to be more adapted for this purpose than that of any other sandpiper, which we shall describe in its proper place hereafter.

The flight of this bird is very quick and undulating, frequently performed close to the water, even when the waves fo the sea run high; at other times it flies in a straight line at a great elevation, particularly when in company of many of its species. The present species is the least shy of its family, and it may be generally approached within a few paces; it is also exceedingly sociable with its own species, but rarely seen in company with other Sandpipers, owing to its peculiar locality and habits.

The call-note of the Purple Sandpiper resembles that of the swallow, and is very often repeated.

Its food consists chiefly in shell-fish of the smallest dimensions, mollusca, and other marine productions, that are washed upon the rocky shelves, and this accounts for the manner in which the bird watches the receding waves at all times on the rocky ground, among the crevices of which a new supply is regularly produced.

It may not be unworthy of notice to remark here, that the sea coast of Holland is particularly well supplied with a kind of bivalve shell-fish, which are collected among the strong masonry before alluded to, and have thus provided a table in the sandy wilderness for these periodical travellers. The fact of their abundance is intruded upon the notice of most persons visiting Holland, by means of the representations of figures and houses that are made at Scheveningen of these shells, and offered to every passing traveller by the fishermen.

The present species is generally in excellent condition, which may in a great measure be attributed to the immense supply of food it finds at each turning of the tides, not only in our moderate climates, but also in every part of the world, whatever the climate may be. Even where floating ice is to be found in mountains, marine pro-

ductions hang to some parts, and this accounts for the Purple Sandpiper being seen to run about on such situations, as recorded by northern travellers.

This species breeds amidst the rocky valleys of Iceland and other northern countries; the nest, consisting of a hollow place in the ground, lined with a few mosses or other herbage, contains three or four eggs of an oblong shape. It does not unfrequently happen that a pair remains here to breed, but the nest and eggs are very difficult to obtain.

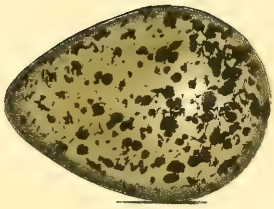
The entire length of the Purple Sandpiper is eight inches and a quarter; the beak one inch and a quarter; the wing, from the carpus to the tip, five inches three lines; the tarsus ten lines and a half.

The plumage of the adult bird in summer seems not to be well understood by British Ornithologists, at least we do not find it properly described by any individual in this country. The feathers of the top of the head and back, scapulars, and tertials are reddish brown, with black centres, which reflect metallic colours according to the light; the tips of the scapulars and tertials are white; the wing-coverts are cinereous dusky; quills dusky, the roots of which are white; the greater wing-coverts are edged with white; the middle tail-feathers are black, with rufous yellow edges; the others have cinereous dusky edges. The forehead and a streak extending over the eyes, pure white; the chin and throat also white; the cheeks are tinged with rufous and finely spotted with dusky; the throat is soiled white, mixed with grey, and spotted with dusky streaks; the crop, sides, and front of the breast are cinereous brown, with dusky spots that surround the shafts, and fan out over the feather, leaving a white tip and edge; the remainder of the under parts are more white, and the spots more elongated and becoming

smaller towards the tail; the upper tail-coverts have the edges of the feathers white; the centres black. The beak and legs of the bird are bright orange-yellow; the claws black and much arched; the iris is dusky.

The plumage of the Purple Sandpiper is not only soft, but very thick, close, and downy, consequently well adapted for the climate it inhabits, and for the purpose of swimming.

The winter plumage is that from which it has most probably derived its name, and in which we have figured it in our Plate. The entire plumage consists of a cinereous dusky feathering for the upper parts, with exception of white edges to the feathers of the wing-coverts; a white streak passes over and surrounds the eye; the chin, belly, and vent are white; the white underparts are all spotted with dusky, in consequence of that colour occupying the centre of each feather. The head and feathers of the back reflect a delicate purple; the legs are yellow, also the beak, at the base, and dusky towards its tip; iris dusky.



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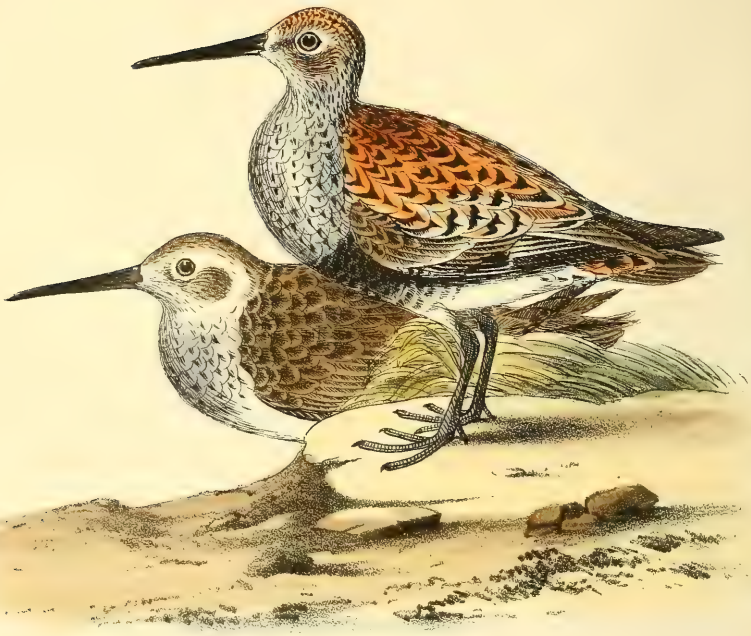


PLATE CCI.

PURRE OR DUNLIN.

TRINGA VARIABILIS.

The Purre and Dunlin, as these birds were formerly called, have many years since been proved to be one and the same bird in different plumages, consequent upon age and sex; we prefer the name of Dunlin, for many reasons, and propose to call it so during the present description. Of all the Sandpipers that visit Great Britain, the present species is the most numerous, and met with all along our coast, particularly in the autumn of the year, and during the winter. The Dunlin is distributed over Europe, Asia, Northern Africa, and America, and is every where plentiful along the sea-coast, where it runs about incessantly in search of its food.

Towards the autumn, the Dunlin retires from the severe northern regions, where it breeds, towards the south, and returns again by the middle of April. The numbers that arrive on our coast in the autumn are so great, that we can hardly speak of flocks of hundreds, but must enumerate them by thousands, although it may appear very incredible; where such a flock alights, it actually covers the sands to a great extent. The migratory journeys of the Dunlin are performed early in the morning, or late at night, when they fly

close to the ground along the sea-shore, or high in the air across the water, flying in a straight line at a quick pace. When the flock is put up by the approach of an enemy, it only flies to a little distance, and presently returns again, provided the spot affords food in plenty. The locality best suited to the habits of the Dunlin, is flat, soft, slippery, and muddy ground close to the water's edge, either of sea, lake, or river, but the larger numbers will at most times be found along the sea coast.

It seems that the Dunlin has an aversion for trees, grass, or cover of any kind, although not apparently from any feeling of fear or distrust, since we know that it frequents shores close to cottages, where the country possesses the usual attraction of being open and bleak.

It is worthy of observation that the old and young birds of this species are hardly ever known to migrate in mixed groups, but always keep each to themselves; the old birds may be known by their uniform plumage, whereas the young differ in plumage very greatly, which may be owing to differently advanced states of moulting, and thus form a motley group.

The general appearance of a flock of Dunlins in spring plumage, is exceedingly beautiful, whether on the wing or on the ground, particularly in consequence of their motions being simultaneous, as if by command of a leader. When the Dunlin is in the act of feeding on the ground, it carries its body in a horizontal direction, and its head in unison, with a short neck, advancing all the while with ease and grace, and is able to run very fast if urged to speed. The flight of this species has nothing peculiar in it, and only shews its affinity to its family.

This bird is not shy, and can easily be kept in confinement, the required food is, however, a drawback to

making it a companion in a sitting-room. The call-note resembles the sound *kwee, kwee!* and is very often heard. The food of the Dunlin consists principally of insects and their larvæ, and small worms, which it draws forth with its beak out of the soft mud; and for want of these, small beetles, gnats, and sandflies, where the ground affords them. In confinement, worms must be chopped up in bread and milk, which very soon accustoms the bird to universal paste, varied from time to time with a supply of worms; and accompanied at all times by a dish of clean water for bathing, and for standing in to cool its feet.

The present species retires to the north-eastern parts of Europe to breed; Iceland and Lapland are also the birth-places of great numbers. It has been remarked, that the Dunlin follows the custom of the rook, in constructing its nest in society with those of its own species, thus accounting for the large flights that keep together at all times of the year. Thus much is ascertained, that these birds choose their breeding locality on flats inland, and at a considerable distance from the sea, and where they breed several broods are hatched; the nest consists of a hollow scratched in the ground, generally on a raised clod or hillock in moist situations; this hollow is scantily lined with dry mosses, and other vegetable productions found in the neighbourhood; the eggs are three or four in number and marked as represented in our plate. During the time of hatching, the male bird amuses its mate with its song, but as soon as danger approaches, he gives notice of it by means of an alarm note, which gives the female time to run from the nest, and assist in worrying the enemy. This behaviour frequently shews the intruder where the nest is, and thus becomes the cause of its destruction, or rather that of the eggs. The young leave the nest as soon as they are

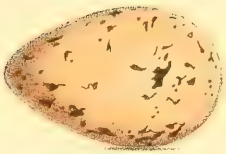
hatched, and hide so effectually, that it requires a dog to find them. Some ornithologists inform us that the Dunlin only shews itself inland during the breeding-season; we have, however, shot several on the banks of the Thames, many miles from its mouth, during the winter, particularly when the snow lay deep on the ground, at which times these birds frequent patches of sand or gravelly creeks, which have been sheltered from the snow by overhanging banks. The Dunlin is known to breed annually in the northern counties of England, and in Scotland.

The measurements of the Dunlin are these; entire length eight inches; the beak one inch and a quarter; the wing from the carpus to the tip four inches and a half.

The adult in spring plumage bears great resemblance to the foregoing species, the Purple Sandpiper, at the same period of the year, but the beak and legs of the Dunlin being black, distinguish it without a moment's doubt. The plumage of the top of the head and back is ferruginous brown with markings of dusky and black on the centres of the feathers; the neck is greyish-ash, spotted with black and dusky, the spots being most numerous about the upper parts of the breast and sides; some appear on the flanks; the belly and vent are white; the rump and upper tail-coverts are ash-colour and black; the middle tail-feathers dark hair brown, with paler edges, the outer ash-coloured; the chin is white; the cheeks streaked with hair-brown and grey; the iris brown.

The winter plumage of the same bird is a general colouring of bistre-brown with pale edges to the feathers and a tinge of cinereous ash-colour; the chin, belly, and vent white, the iris dusky.

The egg figured 201 is that of the Dunlin.



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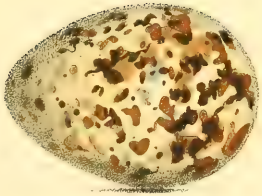

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PLATE CCII.

PECTORAL SANDPIPER.

TRINGA PECTORALIS.

The Pectoral Sandpiper is a bird of rare occurrence in Britain, and has not hitherto been met with in any other part of Europe. Its native regions are the northern and north-western parts of America. Mr. Audubon describes this bird as frequenting the sea-shore and the mouths of rivers, where it may be seen, most particularly at low-water, in search of food, which it procures by probing the soft mud or sand with its beak, for insects; it has never been met with in the interior by any ornithologists that we are aware of, whence one may with propriety infer that its favourite locality is by the sea-side, and its food marine insects. Respecting the reproduction of the species, nothing is as yet known or described.

The dimensions of the present species are as follows; the entire length nearly nine inches; the beak one inch one line; the wing, from the carpus to the tip, five inches two lines; the tarsus one inch; the middle toe, without the nail, one inch.

The top of the head is rufous brown, spotted with dusky; the nape cinereous: the hinder part of the neck, back,

scapulars and tertials are yellow and brown ochreous yellow, with the centres of the feathers dusky at the tips, and cinereous at the base; the lesser and greater wing-coverts are dusky, with pale wood-brown edges; the secondaries are edged with white, and the remainder part dusky, as well as the quill-feathers; the rump and two middle tail-feathers are black, the outer tail-feathers are cinereous black, and all of them are edged with yellowish-brown; from the beak extends a dusky line to the eye, and over it a white streak; the chin, belly, and vent are white; the cheeks, sides of the neck, and upper part of the breast are spotted with black, and more or less tinted with wood-brown and yellow. The eyes are dusky; the beak and legs olive-green; tip of the beak and claws dusky.

Pl 203.

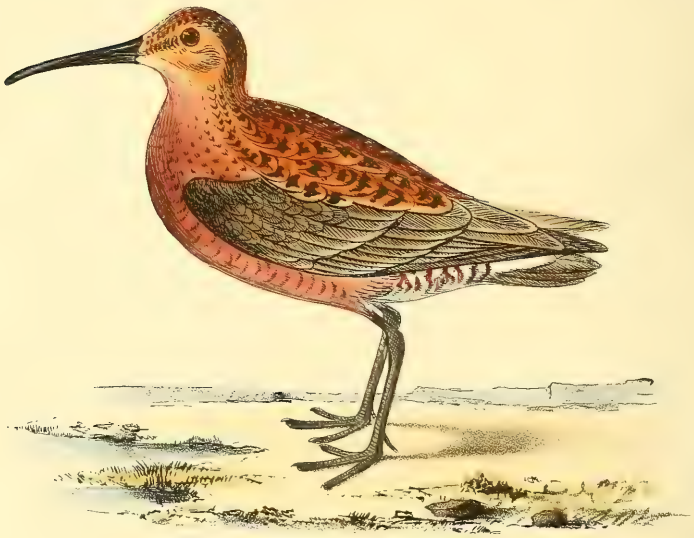


PLATE CCIII.

CURLEW TRINGA.

TRINGA SUBARQUATA.

The Curlew Tringa was first introduced to the notice of British ornithologists by Pennant, and a gentleman of the name of Bay, who met with a specimen at Sandwich, and this species was considered of rare occurrence, but, since the subject is better understood, and the distinguishing marks have been more generally pointed out, the Curlew Tringa is not only frequently met with on its passage north or south, but several pairs are known to breed here, and remain consequently all the year round with us.

The geographical distribution of the present species extends not only over Europe, Asia, and Africa, but also over the northern parts of America, yet it nowhere appears in such great numbers as some others of its family. In Europe it extends over the most northern countries, except Iceland and the upper part of Norway, and from thence spreads over the entire continent to the most southern countries. In Asia it ranges from north to south through Persia and India. In Africa it is also to be met with in Egypt and at the Cape of Good Hope; and in America its principal sojourn is in Canada and Georgia.

The locality frequented by the Curlew Tringa is most frequently the sandy, flat, sea-coast, and, during its migrations, also the flat shores of inland seas or lakes, and ponds, where the vegetation is short and thin.

During high-water the Curlew Tringa passes the time on the shores of rivers, lakes, ponds, &c., but no sooner has the tide turned and left the muddy flat shores of the sea exposed, than the bird returns thither, and remains closely following up the receding waves in pursuit of its food, which is obtained by probing the soft mud with its bill.

The food of this species consists in small worms, insects, shrimps, sand-hoppers, and the larvæ of insects, on which it thrives exceeding well, and becomes fat.

In confinement it may be kept on universal paste, provided a constant supply of fresh water is not wanting, as this bird never swallows its food without having first dipped it in water.

That the Curlew Tringa is a migratory species is well known and generally acknowledged, but how far it journeys north to breed is not well ascertained: in Europe we have reason to suppose that Finnland is the country where the greatest number congregate for that purpose, although some few remain in England, and on the opposite coasts of Holland and France. We are not able to give any particulars respecting the nest and eggs; Temminck describes the eggs as resembling those of other sandpipers in colour and shape, but we have never seen a specimen either in a public or private collection: should we be so fortunate to succeed in our endeavours to obtain the sight of one, we shall figure it in a subsequent number.

A considerable proof that this bird does not travel to any great distance northward to breed, is afforded by the early return of individuals in the end of our summer, fre-

quently in July; the young also arrive in groups of ten or twelve in August and September.

The flight of the Curlew Tringa is quick, and performed by rapid motions of the sharp pointed wings, while flying at a high elevation; but skimming, when passing low over the water or flats. By nature this bird is not shy, but may very easily be approached within gun-shot; and when surprised by an enemy, it squats close to the ground and becomes an easy prey, provided there is only a single individual on the spot; where there is a party congregated, they are more circumspect, although when fired at they soon return again to the same spot. We ascribe this latter circumstance to the local nature of the spots frequented by these birds, the soil of which affords a greater quantity of food, that suits their taste, than is to be found elsewhere.

The day time is passed by this species in feeding and roosting, and the night in travelling during the time of migration, but at other seasons the Curlew Tringa lies quiet during the night.

The call-note of this species is a shrill piping sound, which it utters at times on the wing, but not frequently.

The Curlew Tringa is in all states to be distinguished from the other sandpipers, by its curved beak, white rump and upper tail-coverts, and also by its longer legs, principally consisting in the greater length of the naked part of the tibia.

The entire length of the Curlew Tringa is seven inches and a half; the beak measures one inch and a half; the legs, including the naked part of the tibia, one inch nine lines. The beak of the Curlew Tringa extends from the forehead in a graceful sweep to the tip, as represented in our Plate, and is of an entirely black colour. The legs are also black in the adult and dusky in the young bird. The iris is very dark

brown. The plumage of this species in different stages is very varied, we therefore describe it here. The adult male bird has the head and back bright rust-coloured, with black spots and marks on the feathers; the forehead, chin, and circle round the eyes are whitish; the space between the beak and eyes dusky; over this space and the eyes runs a band of bright rust colour; the cheeks are rufous and white intermixed, and streaked with dusky; the throat, breast, and sides are reddish rust-colour, the latter with white edges, and a dusky marking between the two colours.

The thighs, belly, and vent are white, with rust-coloured markings, and arrow-shaped black spots and streaks. The edge of the wing is white with dusky spots; the wing-coverts are cinereous dusky, with black shafts and paler edges to each feather, the tertials are more decided in colouring; the secondaries still darker, with white edges, the quills are dusky; the lower part of the back is blackish grey. edged with white; the rump the same but lighter, and white on its sides; the upper tail-coverts are pure white with dusky square spots; the tail brownish-ash, with white edges and shafts.

The winter plumage of the adult is as follows,—the head, back, scapulars, greater and lesser wing-coverts, and tail are ash-grey, and faintly marked by the pale dusky centres of the feathers; the cheeks, sides of the neck, and breast are the same, but much fainter; the chin, forehead, region of the eyes, breast, belly, and vent are soiled white; the rump and upper tail-coverts, white, with dusky markings as in the summer.

The plumage of the young bird is also remarkably differing; the top of its head, nape, back, scapulars, wing-coverts, and tertials are yellowish ash-colour, with black spots, and greenish yellow edges, the larger feathers on the back and

upper parts are marked with a black zone, that divides the light edges from the central colouring; the tertials have rufous edges on their outer webs; the fore part, sides, and front of the neck are buff-colour, finely marked with black, the rest of the under parts are white, as also the sides of the rump and upper tail-coverts.

PLATE CCIV.

SCHINTZ SANDPIPER.

TRINGA SCHINTZII.

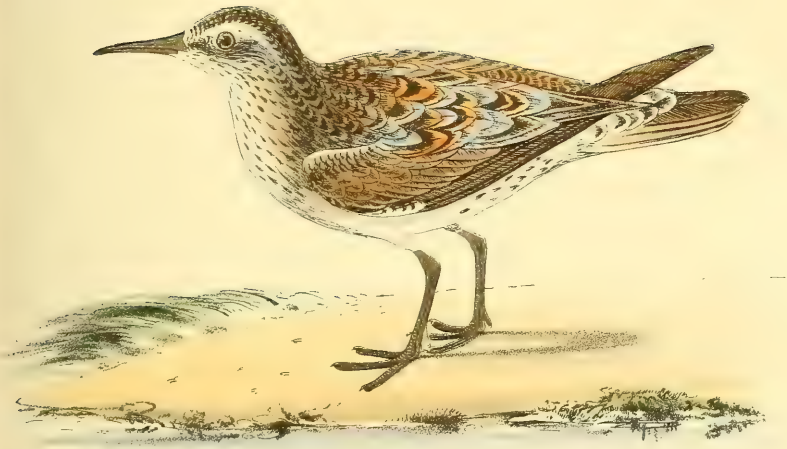
The Schintz Sandpiper has been included in the list of British Birds since the occurrence of a specimen that was killed near Stoke Heath in Shropshire, and which is still preserved in the collection of Sir Rowland Hill, as we are informed by Mr. Eyton.

It is most certainly a very rare visitant in Great Britain, and is nowhere in Europe plentiful.

According to some continental ornithologists, this Sandpiper is generally seen in company with the purre or dunlin, the stints, &c., but very seldom in flocks of its own species. In Denmark, Holstein, and Schleswig, and along the borders of the North Sea and Baltic, it is not very uncommon, and several pairs may there be found to breed in company, particularly on the Island of Rügen.

The general appearance of the Schintz Sandpiper is not very different from that of the Dunlin, but its larger size when the birds are both on the ground together, will be a great assistance to the naturalist in singling it out; its movements resemble those of most others of its genus, it runs with ease, and its flight is exceedingly quick, and where there are several together on the wing, they fly in a compact body.

Pl 204.



It is also observable that a single Schintz Sandpiper being on the ground, is so little afraid of man, that one may watch the motions and manners of this pretty bird with great ease: this is so conspicuous that it may serve to point out what species the individual belongs to. The peaceable nature of this species is equally observable, as it associates not only with every other species of Sandpiper, sanderlings, and stints, but acts with any of them in concert as a subordinate subject. Its call-note is best described by the word *trree, trree!* uttered in a shrill unmelodious manner.

The food of the present species consists in aquatic insects, and their larvæ, small worms of all descriptions, and small beetles which it finds by the water's edge and on moist meadows, particularly where cattle feed.

In consequence of the late return of this bird in the autumn from the north, we infer that it breeds generally in very high northern latitudes, although we are informed, as before mentioned, that some breed also on the shores of the Baltic and the coast of Denmark, where they choose a swampy ground interspersed with grassy knolls on which the slightly constructed nest is placed, and in which four eggs are deposited, that are smaller and narrower than those of the dunlin. The spots on those eggs are marked in a smaller proportion, the ground colour is pale olive-green with chestnut-brown markings.

The measurements of the Schintz Sandpiper are as follows: —The entire length six and a half inches; the beak measures nearly an inch; the wing, from the carpus to the tip, four inches and a half; the tarsus eleven lines; the middle toe and claw ten lines.

The specimen from which our plate was taken, being in an intermediate state of plumage, pleasingly unites the feathering of summer and winter, still bearing some of the rufous

and brown feathers of its summer dress, interspersed with its otherwise sober coloured winter plumage. This specimen has the upper part of the head and cheeks ash-colour tinged with brown, the nape and breast the same; the chin, throat, and a streak over the eye white; the feathers of all these parts having dark shaft streaks; the scapulars and back present a mixture of the summer feathering, consisting of dusky feathers bordered with brown or rufous, among which are many feathers of a clear pigeon grey with narrow black shafts. The wings and outer feathers of the tail are bistre-brown; the quill-feathers of the wing and middle feathers of the tail dusky. The rump feathers dusky, bordered with paler brown. The belly, flanks, thighs, and upper and under tail-coverts silvery white, some of the latter feathers as well as the flanks having dusky centres. The under parts of the quill-feathers are ash-colour with white shafts. The iris is deep brown; the beak is, in the adult, entirely black, within and without; in younger birds the beak is flesh colour at the base; the legs are shorter and thinner in proportion than those of the dunlin, and naked for a considerable space above the knee, between three and four lines—they are in colour black, but in cabinet specimens soon become olive-brown.

The young on their exclusion from the egg have the beak straight in form, and greyish-black in colour, as well as their clumsy little feet; their plumage is a mixture of grey, black, and rufous. At a more advanced state, they have the upper parts rufous, with black centres to the feathers and white tips; the breast and flanks are pale brown or dirty white marked with large and rather coarse dusky spots: the beak is by this time become curved as in the adult.

The winter plumage of the adult much resembles that of the Purre and dunlin at the same season. In that state the top of the head, breast and all the upper plumage, including

the long and pointed tertials are clear ash-grey; the breast and head spotted with dusky, the rest having only a narrow shaft streak (as in our plate) the eyestreak, chin, and throat are white, as well as the belly and under parts; the small coverts of the wings are brownish-grey, the quills dusky.

In perfect adult summer plumage this bird also resembles in a striking degree the above mentioned dunlin or purre: it has the top of the head, back, scapulars, and tertials chestnut, marked in the centre of each feather more or less with black: the nape, cheeks, and breast more distinctly spotted with black on a grey and white ground; the forehead, eyestreak, chin, and throat pure white. The lower part of the breast at this season is deep black, the edges of the feathers tinged with grey.

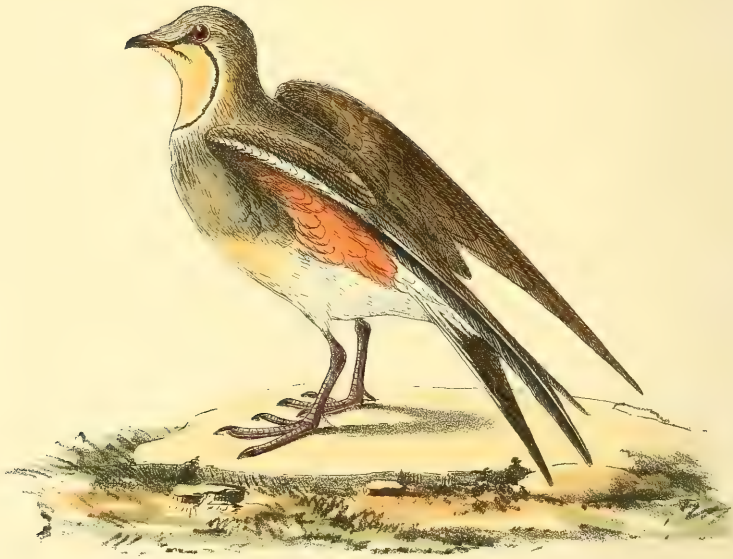


PLATE CCV.

PRATINCOLE.

GLAREOLA TORQUATA.

The Pratincole is a rare accidental visitant in Great Britain, and has been only added to the list of British Birds since the year 1804, when one was shot in the month of May in the vicinity of Liverpool, and is, according to the Rev. L. Jenyns, now in the collection of the Earl of Derby.

Temminck informs us that this species is very abundant in Dalmatia during the spring of the year, particularly on the borders of the Lake of Boccagnaro, and that it breeds in Sardinia.

The south and south-eastern countries of Europe, Asia, and Africa, are the principal residence of the Pratincole, owing to these warmer climates being more favourable to its nature; which also accounts for its rare occurrence in England, Holland, and France; during the summer it is not uncommon in the region between the Black Sea and the Caspian Sea. In Hungary, great numbers frequent the well-known extensive marshes, and also Sclavonia and Turkey.

The chosen locality of the Pratincole during its summer residence in Europe, is in the extensive, sandy flats that are covered with water during the winter, near lakes, rivers, and ponds, where the vegetation is scant, and the ground open and bare of trees or shrubs; close to the water, or in the shallow water it is not found, but low meadows, where cattle and sheep feed in great numbers, seem to suit the habits of the bird greatly, they are there seen running and flying about in large flocks. When the bird retires to the sea-shore, it is only for the purpose of awaiting the arrival of its companions, to cross the Mediterranean twice a year, namely, in spring and autumn. The French name for the Pratincole is "Perdrix de Mer," but as this species has nothing to do either with partridges or the sea, it is a very inappropriate one. In fact, as this species bears so little resemblance to any other European bird, it is very difficult to locate it properly, and although we have placed it between the sandpipers and the rails we feel that it has not much claim to be there.

The appearance of the Pratincole, when on the ground, approaches that of the sandpipers most, with exception of its lengthened wings and forked tail; it hardly ever stands still, unless it has reached a little lump of earth to rest upon for a moment and to look around; its motions on the ground are more like those of our wagtails, inasmuch as it runs with great velocity in quick short steps, and frequently flies up in pursuit of its food. When anything startles the Pratincole while engaged in pursuit of its food, it does not, however, like the wagtails, raise its tail, but, on the contrary, beats it twice or thrice on the ground, quite closed up, and soon after takes wing. The flight of this interesting bird is exceedingly beautiful; it acts on the wing very much like the terns, particularly the black tern (sterna nigra); its evolutions are quick and graceful. When a flight of them passes through

the air within sight, they proceed very swiftly, and on lowering to alight they shoot like arrows by one another; finally, they once more open their wings to their full length and highly raised, and then settle rather closely spread over the ground. In its nature the Pratincole is sociable and very lively, it is also very restless. Where they meet with suitable ground, they remain for some time in the neighbourhood, flying away in a body, and often returning again in a moment, to the great surprise of the beholder who may happen to have startled them up.

The flocks of these birds range generally in number from ten to twenty, but rarely mix with any other species; they also breed in groups as it were, the nests not being far distant from each other. During the time of migration they unite in flocks of several hundreds, settle at times on the wastes before-mentioned, each at some distance from its neighbour, and if one only calls out, they all take wing, circle in a body once or twice over the ground, and then move off.

The call-note sounds like the word, *carjah*, *carjah!* and *bedræ*, *bedræ!* very quickly expressed.

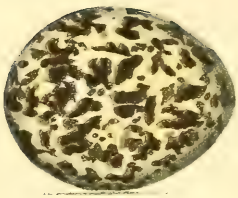
It is an easy task to tame the Pratincole in confinement, whether it be old or young, and if carefully treated it will live some time.

The food of the Pratincole consists chiefly in cockchafers and other beetles of lesser dimensions, and grasshoppers, for which purpose the bird is supplied with a powerful beak, a wide gape, and strong digestive powers and nerves about the stomach and swallow; it also takes gnats and flies during its search for the first-mentioned food. It has very incorrectly been said, that it feeds on small insects, which we are able to contradict with due respect for several authors; the beetles and their remains that are found in its stomach are

of the following genera: Melolontha, Scarabæus, Cupris, Aphodius, Hister, Carabus, Harpalus, Cincidela, etc., etc., also the male beetle (gryllotapha), which it obtains from among the young wheat, grass, etc.; or on the wing where such an opportunity offers, and when captured, the bird holding its prize with its beak, beats it on the ground in order to kill it, and to divest it as much as possible of its legs and horny wing-coverts.

Respecting the breeding of the Pratincole little is as yet known, beyond the report of shepherds who have frequent opportunity of finding the nest; this is a slight construction of dried grasses placed in a hollow on the ground beside some wild flower or meadow production. The eggs are said to be three or four in number, and are spotted with brown. By the beginning of August, the young fly about with the adult birds; the parents, being very much attached to their young brood, accompany them until the beginning of September, when they one and all think of returning, and going southward for the winter.

The measurements of this species differ greatly according to age, owing to the growth of the tail, which varies nearly one inch between old and young birds. The adult measures about ten inches, the young only nine, to nine inches three lines. Some instances of very old males are on record which measured ten inches and a half, and a trifle more, in consequence of the greater length of their tail-feathers. The head is rather bulky towards the hinder part, and tapering towards the beak; the eyes are very far from the beak and wide apart, the forehead flat; the neck short and thick; the tarsi and tibia almost of equal length; the carpus is short, and the quills very long in proportion, the outer tail-feathers exceed the two middle feathers by nearly two inches and a half in length, the tail is therefore much



forked; the general texture of the feathers is silky, fine, and close—the shafts of the quills are very stout at the base, tapering to their tips, and a little turned up at their extremity.

The beak is broad at the base and pointed at the tip, straight from the forehead on the upper ridge, and arched to a point at the tip, the upper mandible receives the under one within it, the gape is very wide and elastic; in young birds the beak is not nearly so large as in the adult, which is an apology for some former ornithologists who have made two species of it in consequence.

The colour of the beak is black, the base of the lower mandible bright vermilion, in the spring particularly.

The iris is chestnut-brown, and the eyelids are white, consisting of small feathers. The legs are transparent black with a red ground colour, the claws black.

The feathering of the adult is as follows:—the chin and throat mellow rufous yellow, palest at the chin and surrounded by a narrow velvet black band; the breast is brownish yellow. The belly, thighs, vent, and under tail-coverts white; the under wing-coverts are rich orange brown; the head, neck, back, scapulars, wing-coverts, and tertials umber brown, the rump orange brown, the upper tail-coverts white; quills dusky; the feathers of the tail dusky, with their bases white. Male and female nearly alike.

The young of the year have the upper plumage brown, with reddish-brown edges to the feathers; the throat pale brown, and the band around it, which is black in the adult, only marked out by a few dusky brown spots; the breast clouded with brown and dusky, and the under parts pearl-grey and white.

The egg figured 205, is that of the Pratincole, and

differs greatly from the egg we erroneously figured in the quarto edition of our work on British Birds, but having had that from the collection of a friend who is considered a first-rate ornithologist we can only under present circumstances retrace our steps and represent the proper one.

Pl 206.

PLATE CCVI.

LANDRAIL.

CREX PRATENSIS.

The Landrail is a regular summer visitant in Great Britain, and very generally distributed over the kingdom during that time of the year: it arrives early in May from the south of Europe, but, strange to say, we never met with any one person who has seen it arrive; they must of course travel by night and probably await a favourable wind for crossing the Channel, as their flight seems to us very ill adapted for long journeys or encounters of even a breeze.

Its geographical distribution extends over most parts of Europe, Asia, Africa, and even the West Indies. In Europe it has been met with very near the highest parts of Norway, but the greater numbers only frequent our climate in the summer, and, during the winter months, inhabit the south of Europe and the warmer regions in general. The chosen localities of the Landrail are low meadows, grassy osier beds and clover. As soon as the bird arrives, it gives notice of its presence by its incessant call-note, *crek-crek*, *crek-crek!* pronounced in a hoarse but subdued note; this note it utters chiefly in the morning and evening, until the hen sits on the eggs. The nest is not often found, owing to its being gener-

ally placed among the standing grass that is allowed to remain undisturbed for hay, and consequently on an average just long enough to allow the young brood to run about. In our part of the country (Chertsey) the Landrail is very plentiful, particularly on what is called Chertsey mead, and we have the opportunity of watching the birds' habits in perfection: but the number of them is not the same every year, which we attribute to the wind and weather they meet with during their migrations. The slightest obstacle will induce the Landrail to remain on the south side of the Channel to breed, such as a sudden change of wind, or cold weather setting in. The numbers that are here this year are less than usual on the mead, which may be owing to a high flood that occurred later than usual in the spring, and we are the more induced to believe the correctness of this supposition as we have obtained information from a friend, who resides on higher ground, that he has some of these birds in his fields where he has never before known them to be.

The habits of the Landrail are peculiar to itself, it skulks at all times and hides so cleverly, that, if it were not for its call-note, few individuals would ever be aware of its presence; its narrow shape enables it to run through the thickest herbage with a velocity that outdoes the rapidity of many a dog, who has no other means of following up this game but by continually jumping over the grass. We have many a time gone in pursuit of the bird with one of the best nosed dogs imaginable, but the Landrail could generally foil the animal by doubling among the grass. The best mode of obtaining the bird is to leave it unmolested until all the grass is cut but a small portion, and then hunt this over carefully and silently, load the gun with a small charge of powder and No. 8 shot, and fire at it as soon as it rises from the ground; the flight of the Landrail is slow and close to the

ground, consequently very easy to kill, yet if it is only winged, a dog is required to find it, and it is impossible to follow it without, unless the pursuer watch the tops of the grasses moving as the bird runs.

The food of the Landrail is worms, snails, and insects, as well as herbage and grass seeds, on which it gets generally so very fat, that when dressed for the table it is quite a rich and savoury morsel. The best way to roast this game is by rolling it up in a lettuce leaf in order that it may not be too much dried up.

Where the grass is left for a longer period on the ground than is usually done, the birds have two broods in the summer; this may not generally be allowed to be so, but we speak from experience, having on the same day killed birds nearly full grown, and old ones full of eggs, in places where they have not been disturbed.

The nest is placed on the ground among the grass and consists of a fabric of dry leaves and stalks of the locality. The eggs are generally from eight to ten in number. The young, which are covered with dull black down, run about immediately and are very difficult to find: they make their appearance between the beginning and middle of June, and some a fortnight later. After the young are hatched, the male recommences its call-note and often thus betrays the precise spot where the family reside.

The lowest, rankest, and thickest herbage is generally its situation, and on the approach of an enemy they run invariably to some dry overgrown ditch for shelter. While going in pursuit of these birds, we have found among other tricks which the Landrail practises to avoid being put up or flushed, that it climbs trees of low growth and runs along their branches with the greatest ease, and hides among the foliage, although this is its last retreat, from whence it

is forced to take wing and becomes an easy mark to kill.

Before finishing the history of this bird we will add a circumstance that may be of use to any one who wishes to get sight of a Landrail without much trouble, provided there is one or more in the immediate neighbourhood. We were fishing off the banks of the river Thames for trout, with what is called running-tackle, during which process the reel was frequently wound and unwound, thus producing very nearly the sound of the Landrails' call-note; to our surprise we heard the sound repeated close behind us, and, on looking round, we saw a bird of this species running out of the grass not more than five or six yards from us; it was evidently attracted to the spot by the noise of the reel, and since that time we have more than once made the Landrails answer to our call thus produced.

The Landrail measures about ten inches in length; the wing, from the carpus to the tip, four inches and a quarter.

The plumage of the Landrail is very handsome, and some of its tints exceedingly beautiful and delicate, the head, neck, back, scapulars, tertials, tail-coverts, and tail are yellow, with brown centres to each feather, and a dusky elongated streak on their shafts; the wings and wing-coverts are of a rich golden chestnut; the quills are reddish brown; breast, belly, thighs, and under tail-coverts pale buff-colour with transverse bars of umber brown. The cheeks and sides of the neck, and a streak over the eyes, are tinged with delicate greyish-ash; the beak is wood-brown on the tip and ridge of the upper mandible, flesh-coloured at the base and under mandible; the legs are pale raw-umber, with a tinge of flesh colour; the iris hazel.

The female and young have less tinge of grey about the head, and the colouring of the wings and wing-coverts is less bright in tint, they are neither of them quite so large in size.

The egg figured 206 is that of the Landrail.

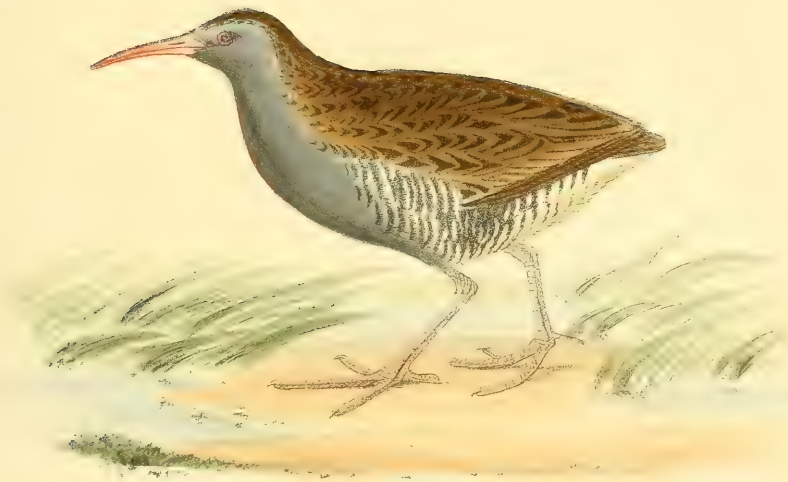
PLATE CCVII.

WATER RAIL.

RALLUS AQUATICUS.

The Water Rail is a British bird well-known to persons who are either fond of snipe-shooting or angling, as it frequents most of our low and marshy districts near rivers, ponds, ditches, and swamps, and it is also widely distributed over Europe, Asia, and the northern parts of Africa. There are several notices of this bird having been met with singly and also in flocks on the Atlantic Ocean ; and like some of our warblers that remain with us the whole year, yet increase in numbers during certain parts of the year, the present species is more abundant with us during the spring and autumn than at other times.

The specimen from which our drawing was made, was taken near Esher, in a very singular manner; a woman put her hand in her hen-house for the purpose of taking hens' eggs out of a nest, and the bird in question took hold of her finger; she drew it consequently out of the nest and brought it to us for sale; as the weather was very inclement this bird must have run in there probably for shelter or food ; we kept it caged for several years, and, although it seemed happy enough, we could not tame it or make it come to



us for food: bread and milk and chopped raw meat suited it very well, and worms from time to time seemed a dainty relish, fresh water was also daily supplied, and was a great requisite. This bird became, on account of its inoffensive and pleasing habits, a great favourite with us, and lived in perfect harmony with many other species, its residence being in a garden aviary. It was remarkably quick in all its motions, to the great discomfiture occasionally of its companions. We had at one time in the same place a pair of godwits; these pretty creatures were in the habit, after heavy rains, of boring in the soft gravel of their enclosure in order to procure their favourite food, worms, and often, when so employed, the Rail from his hiding-place would watch their motions, and when one of them brought up in his beak a bright and tempting worm, this little creature would rush to the spot, snatch the worm from its captor, and retreat with it to his shelter, before the astonished godwit had recovered from his surprise; indeed, so quick were his motions, if any attempt was made to catch him, that his speed was greater than the eye could follow, his transit across the cage having only the appearance of a shadow. At other times he would walk carefully and sedately about, but would seldom come forth to feed when any one watched, unless tempted by a small frog, or something equally irresistible. It was a curious thing to see him manage this last delicacy; if about half-grown he would take it by one of the hind legs, and tightly holding it in his beak would wash and beat it about in the water-pan until no strength, motion, or stiffness remained in the reptile, he would then begin to draw it into his beak as the boa-constrictor is said to do his prey, swallowing it by degrees until all had disappeared. We have the bird still in a glass-case stuffed, in its usual attitude, the same as we represent it.

The locality in which we very often meet with this species is by the river-side, among the thickest herbage, flags, osier-beds, and muddy ditches, and also frequently perched on the lower branches of over-hanging willows, and ash, and elder trees.

We have seen it more frequently during the severest winter weather than at any other time, but never more than a pair in one spot. It conceals itself almost as cleverly as the landrail, but owing to its silence must be put up by a dog, or surprised in an exposed situation. On the continent of Europe it is considered a migratory visitant, but this may be owing to its close habits, and to its being more observed during its passage in the spring and autumn.

The flight of the Water Rail is slow and apparently ill-sustained, for we never saw it even leave the neighbourhood. This is very remarkable when we consider the several authentic accounts of many of them having at different times been seen and even captured several hundred miles from the land, as before-mentioned. This bird runs with great ease, not only on the ground, among the cover of grasses and the thickest aquatic herbage, but also along the branches of trees and railings.

The food this species generally looks for in a natural state is worms, slugs, aquatic insects, and the smallest frogs, &c.

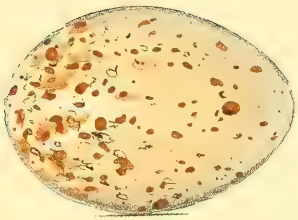
The nest, which is composed of grasses and sedge, is very difficult to find, owing to its being so closely concealed among the thickest herbage, and more generally placed in spots where one can hardly ever keep a footing. Now and then a nest is found on the banks of the river Mole, in Surrey, where it is more easily taken, in consequence of the nature of the ground and luxuriant growth of sedge-weeds; the eggs are, in size and colouring, as represented in our Plate.

The Water Rail measures from eleven to eleven inches

and a half in length; the wing, from the carpus to the tip, four inches nine lines; the beak, one inch nine lines, dusky at the tip and upper ridge, and bright red at the base, which colour fades gradually in that of the dusky tip; the eye is Venetian red. The top of the head, neck, back, scapulars, wing-coverts, tertials, and rump, are olivacious dusky brown, with black oval centres to the feathers; the quills are dusky, as also the tail. A streak over the eye, the cheeks, chin, sides and front of the neck, and breast are bluish slate-colour; the sides and flanks are barred black and white; the vent is raw umber; under tail-coverts, soiled white. The legs are brownish-claret, with bluish joints.

The male and female are alike.

The egg figured 207 is that of the Water Rail.



204.

206.

PLATE CCVIII.

SPOTTED CRAKE.

CREX PORZANA.

The Spotted Crake, although considered a summer visitant in Great Britain, occurs more frequently in milder climates than in our own; and the exceeding stealthiness of its habits, combined with its actual rarity, concur to render it a bird very seldom obtained. The most northern latitude of this species in Europe is the central part of Sweden, from whence it extends over all the southern countries of the European continent, occurring more plentifully on approaching the south and south-east. In Asia it is variously distributed according to the temperature of the land, and it has frequently been obtained from Africa.

The locality frequented by the Spotted Crake is flat, low, and marshy land, particularly where the ground is well covered with flags and sedges; and in countries whose climate suits this species it is very plentiful.

The middle of March is the time when this species begins to migrate northward from its winter retreat in Italy, Greece, Turkey, and the opposite shores of the Mediterranean. Like many other species of birds, this also chooses the night for its time of migration.

There is little doubt that the Spotted Crake breeds in

England; but on account of the localities it frequents and the usual circumstances that cause those spots to be left undisturbed during the breeding season, it is more difficult to find the nest and eggs than it is to meet with the bird itself: we allude to the circumstance of the meadows being generally left unfrequented until after hay-making, during which time the young of Crakes and many other birds, must have had time to quit the nest.

In our neighbourhood, birds of the present family are every now and then met with, and a young of the preceding year of the Spotted Crake was shot in April by a person who is exceedingly fond of this sport, and who fires at every bird that gets up, pursuing this pastime throughout the year. A water-spaniel is the best dog for finding this species, as it invariably hides among the tallest and thickest sedges, or among alder and willow bushes during the day: and the most likely spots in which to find it are the thick grassy edges of a ditch: so much does this bird conceal itself among thick foliage, that it is frequently unable to fly up for want of room to expand its wings. On high and dry ground it is in vain to seek for the Spotted Crake, but it is occasionally found in woods and forests where swamps occur.

When the present species ventures by some chance into open ground during the day, it is seen to run with long strides, and so fast and low to the ground that it resembles more a rat than a long legged bird; to which resemblance its dark brown colour greatly contributes, and deceives sportsmen who are unacquainted with it. Its very light weight allows the bird to run with ease over the surface of water-plants; it is also very expert in swimming, which it performs with ease and keeps up with some continuance. When the Spotted Crake is put up by a dog, or otherwise

disturbed, it flies very unsteadily, and its legs hang down like those of the water rail, and the same wonder-stirring question remains unexplained, as in respect to the rails in general, namely, how the bird can possibly keep on the wing for a time sufficient to perform migratory journeys. It has been observed that when the Spotted Crake flies up in the evening, during the season of migration, it rises to a very great height in the air, where, free from currents arising from trees, hills, and buildings, it flies with much greater ease and rapidity.

The food of this bird consists of worms, slugs, aquatic insects, and seeds, on which it thrives to such a degree that it becomes quite covered with fat towards the autumn, and its flesh is exceedingly well flavoured.

The nest of this species is constructed of the decayed stalks of rushes and water plants, capable of floating on the water, and the inside is very thickly lined, and well rounded to secure the safety of the eggs; as the places chosen for the nest are generally the moist and boggy prominences that rise above the water, it requires to be able to float on the surface during heavy rain or floods. The eggs are numerous, being from nine to twelve in number—eighteen even have been found together, but these were probably the produce of more than one parent bird. The hen sits three weeks on the eggs before hatching, and the young on their first appearance are entirely covered with black down.

The Spotted Crake is very capable of being tamed to a certain degree, and therefore easily kept in confinement, provided a frequent supply of fresh water is not forgotten: the best food is bread and milk, and chopped raw meat intermixed, sometimes with the addition of a few worms and snails or slugs of the smaller kinds.

The entire length of the Spotted Crake is nine inches; the beak measures nine lines; the tarsus, one inch four lines; the naked part of the tibia, six lines; the middle toe, including the claw, one inch eight lines; the wing, from the carpus to the tip, four inches and three quarters.

The colouring of the adult bird is as follows, and when closely examined is very beautiful. The top of the head, neck, back, scapulars, wing-coverts, and tail are olivaceous-brown, with a dusky spot in the centre of each feather, and all, except the feathers on the top of the head, are beautifully spotted or edged with pure white; the quills are dusky hair-brown; the forehead, throat, and a streak over the eye, are purplish-grey; the two latter minutely spotted with white; the nape thickly spotted with black and white; the cheeks are cinereous, spotted with black; the front of the neck and breast are oil-green and grey, spotted with white; belly and vent pearl-grey, the sides barred with black, white, and olivaceous-brown; the beak is olive-yellow, and orange at the base; the eyes are red-brown; the legs and feet olive-yellow. The male and female are very nearly alike, but the cheeks of the female are reddish, and spotted with brown.

The young birds have the upper parts more greenish, and the white spots are more rounded and fewer in number; the belly more white, and the beak and legs are greener in colour, and tinged with dusky.

The egg figured 208 is that of the Spotted Crake.

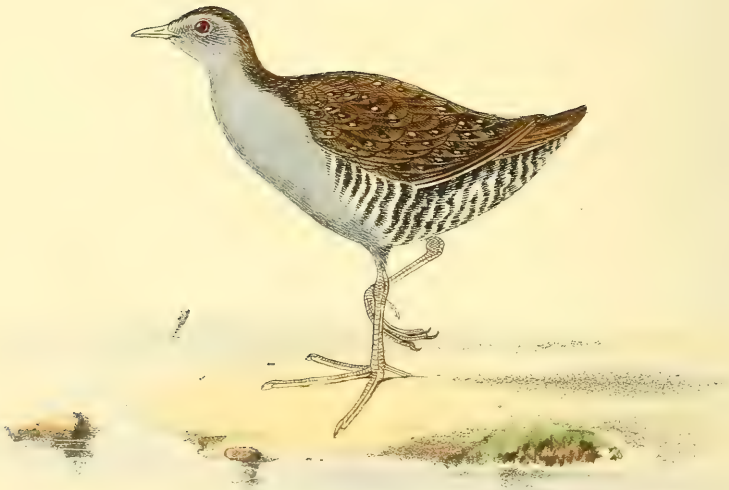


PLATE CCIX.

BAILLON'S CRAKE.

CREX BAILLONII.

Baillon's Crake is an occasional visitant in this country, but owing to its crake-like habits it is not frequently seen; nor is it so much sought after as it might be if the bird were more worth looking for in a profitable point of view.

The geographical distribution of this Crake is very extensive. In France it is by no means uncommon, and is known to breed annually all along the coast. Mr. Baillon, after whom it is named, has met with it in the marshes of Picardy; it also inhabits Switzerland, Italy, Greece, Hungary, and Dalmatia; and is found on the banks of the Elbe and Saale in Germany. From Africa and Asia several specimens are on record, and they differ in no respect from our own. The localities the bird frequents are the same as those of the spotted crake, namely, low, wet situations by rivers, ditches &c., where the vegetation is thickest, among which it hides and runs with ease, and with an indescribable velocity, owing to its very narrow formation.

Several specimens have, from time to time, been obtained in Britain at most seasons of the year, both in spring, summer, and the depth of winter, although it is usually said to be a sum-

mer visitant. The proper place to look for it, is among thick herbage with the aid of a water-spaniel. When it is flushed during the day, it only flies to a short distance, and it requires perseverance to make it take wing a second time from among the grassy or reedy cover where it has found shelter. When a Crake of this species has been obtained alive, it soon becomes accustomed to its cage, its keeper, and its food; which latter should consist of bread and milk, with chapped raw meat, worms, and insects. In a natural state it feeds on aquatic insects and their larvæ, small beetles, and spiders, but rarely, it is believed, on vegetable matter.

The present species runs very fast, swims with ease and grace, and is capable of diving when such a movement is required for the sake of safety; its flight is better sustained than that of most rails, to which its lesser weight and proportionately longer wings contribute greatly.

The note of Baillon's Crake, is a sort of low whistle which can hardly be described.

The locality chosen for the reproduction of the species is mentioned before; the spot selected is muddy, soft ground, overgrown with flags, and rushes, or long grass; the nest itself is formed of stalks and leaves of water plants, and is closely interwoven with blades of grass of divers sorts, so as to make it secure from any rising water, and is deep within for the security of the eggs, which are generally seven or eight in number. The hen bird sits very closely, and on leaving the nest, she bends the surrounding blades over the fabric so as to conceal it from the view of any intruder.

The measurements of Baillon's Crake are as follows: entire length six inches and a-half; the wing, from the carpus to the tip, four inches; the beak, eight lines; the naked part of the tibia, five lines; the tarsus, one inch one line; the middle toe, including the claw, one inch and a-half.

The colouring of the adult male is, on the top of the head, and back of the neck, wood-brown; back, scapulars, and wing-coverts, yellowish-brown, with a tinge of olive, and marked with oval and triangular white spots that are surrounded with black, and some of them have a black spot in their centre; the flanks, vent, and under tail-coverts are black, transversely barred with white; the throat, cheeks, and regions of the eyes, frontal part of the neck, sides, breast, and belly, bluish slate-colour; the beak is olivaceous-green, legs and toes flesh-coloured brown; eyes reddish brown; the quills and middle tail-feathers, brownish dusky; the outer edge of the first quill-feather, white. The female resembles the male, her colouring is, however, somewhat paler.

The young bird has the throat and middle part of the belly white, with transverse uneven bars of brown; the flanks olivaceous, with white spots; the spots of the upper parts are fewer in number than in the adult.

The egg figured 209 is that of Baillon's Crake.

PLATE CCX.

OLIVACEOUS CRAKE.

CREX PUSILLA.

The Olivaceous Crake is a rare visitant in Great Britain, more so than the preceding species. It seems to have obtained the trivial name it bears in our cabinets, more from the colouring of its beak and legs than from its plumage, since the colouring of its feathers is less olivaceous than that of the two former species.

This Crake is the least numerous of all its family in this country, it has been obtained in few instances, and apparently does not like the climate; in Holland it is also rare; but towards the south and eastern parts of the European continent it is more frequently met with, and in many parts by no means uncommon; for instance, in Turkey, Hungary, Italy, and the south of France. The late arrival of this bird in the spring of the year in Europe from the warmer climates of Africa, induces us to class it among birds very susceptible of cold; before the middle of May it hardly ever arrives, and returns again in August.

We are not able to say whether this species inhabits America, as we have no certain accounts of it; neither have we seen any specimens in cabinets that were obtained from

thence. The locality the Olivaceous Crake frequents is much the same as the last described; the specimens obtained, were met with more in open ground than in cover of rushes, sedges, weeds, &c., and it may thus be concluded, that the bird is not so partial to a thick grassy cover; it has been known to frequent some open grounds, that lay low, without being wet or marshy, during the greater part of the summer, in which situation it was almost daily observed by the owner of the land, who was himself an ornithologist. The present species differs from the last, in not unfrequently perching on the branch of a tree, only concealing itself under some few overhanging leaves. During the spring of the year, it resorts to the usual cover of grassy and reedy places, where it seeks for a spot to make arrangements for its nest; the extensive muddy flats that surround ponds or slow streams, suit its habits particularly, and in such localities the nest is generally placed among the rushes. The nest is the most difficult of all its family to find, not only on account of its being so cleverly concealed, but because it is placed in the most inaccessible parts of the soft ground; it requires in the first place an exceedingly good dog, even where a pair of these birds is known to be, and besides an apparatus of planks to reach the spot.

Before the end of May or beginning of June, the Olivaceous Crake does not begin the construction of a nest, by which time the rushes have attained one foot in height; the nest itself is placed either on a tuft of rushes, or on the very surface of the water; in which case the surrounding rushes are bent down and interwoven with grasses, &c., so as to form a cradle, and when the bird sits on the eggs, she draws the next leaves of the rushes over her in the shape of a hood; the size of the nest is consequently much larger than that of the spotted crake.

The eggs are eight or ten in number, measure fourteen lines in length and ten in width, are perfectly egg-shaped, and smooth, but with very little polish; the ground colour is light olive-brown, spotted with darker brown, very much in the manner of the last species, but more distinct. The young, which are covered with black down, run out of the nest as soon as they are dry, and much resemble mice. The food of the Olivaceous Crake consists in insects and their larvæ, which it obtains in swamps and bogs, small snails together with their shells, and rarely worms, many grass seeds and vegetable productions, with which it swallows grains of sand and minute pebbles; in the stomach of this bird, several remains of beetles of divers sorts have been found, as also, empty shells of small mollusca; among others were the remains of flies, gnats, grasshoppers, and water-spiders. During the day, the bird is constantly engaged in the pursuit of these insects, of which it seems ever to find a great supply. In confinement, the Olivaceous Crake is very expert in catching flies whenever they come within its reach; ants' eggs and meal worms are a favourite food, and on bread and milk it thrives well, and becomes very sociable.

The appearance of this Crake when on the ground is very elegant, the head and neck are then prettily thrown back, the body carried horizontally, and the tail lowered; when it runs it generally bends its legs considerably, and moves on with great velocity, its speed being so great that the legs are hardly seen.

This bird is very expert in swimming, dives if necessary, and runs over the green weeds that float on the surface of the water, without making apparently the least impression. The flight is wavering, very near the ground, and is seldom prolonged to any great distance; when surprised and fired at, it rarely takes wing, but runs for shelter; in which it resem-

bles the rest of its family. Towards the evening one may get sight of this bird when it comes running out of a bed of reeds, in order to surprise some nocturnal insect, which it pursues into open ground. The present species has a very great peculiarity that belongs solely to itself, namely, its curiosity; if a person who is acquainted with the habits of the bird very carefully approaches the spot where an individual is known to be, it may be seen to come to an edge of the swamp and utter its piping call-note, as it were in astonishment at what it sees.

The dimensions of the Olivaceous Crake are taken from a specimen in the British Museum, from which our drawing was made for the quarto edition; it is an adult female.

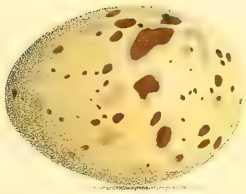
The entire length is seven inches; the wing, from the carpus to the tip, is four inches and one eighth; naked part of the tibia, three lines and a half; the tarsus, one inch three lines; the middle toe, including the claw, one inch five lines.

The beak of the adult male is green, with the base flesh red; the legs and feet are green, with an olive tint; the eyes, red. The top of the head, neck, back, and all the upper parts brown, with a golden yellow tint; the middle of the back black, with some white streaks and spots; the quill-feathers are dusky brown; the tertials have the centres of the feathers black, and their edges oil-green; upper tail-coverts and tail dusky brown; the chin is pearl-white; the sides of the head, front, and sides of the neck, breast, and belly, slate colour; the sides of the body under the wings, brown; thighs, vent, and under tail-coverts, slate colour, spotted with white.

The female has the regions of the eyes pale ash-colour; top of the head, sides and back of the neck pale brown; middle of the back black, with sparing white marks; sca-

pulars brown; wing-coverts and tertials dark in the middle of the feathers, and brown edges; quills dusky brown; chin white; the front of the neck, breast, and belly, buff-coloured; flanks and under tail-coverts, barred with grey, brown, and white.

The egg figured 210 is that of the Olivaceous Crake, from a specimen in our collection, taken in June, 1841, at Littleton, in Middlesex.



208.

209.

210.

PLATE CCXI.

PHALAROPE.

PHALAROPUS LOBATUS.

The Phalarope, better known in Britain by the appellation of the *Grey Phalarope*, is occasionally met with in this country. We ourselves killed one in December 1840, near Shepperton Lock on the Thames, just before a heavy snowstorm, in perfect grey or winter plumage, and another on the 2nd of December 1841, in intermediate plumage. This latter bird was swimming on the Thames, where it had been seen for two days. The chestnut feathers of the summer plumage were still remaining on the throat of this specimen, some feathers of the same colour were still left in the nape of the neck, and the feathers on the upper part of the back, rump, and tertials, were in a perfect state of summer plumage; its weight, one ounce and a quarter.

The geographical distribution of the Phalarope is extended over Europe, Asia, and America, but it is least numerous in Europe; its preference for the highest northern latitudes is well-known. In Greenland it is of very frequent occurrence; the severe climates of North America, the north of Asia, and the northern parts of Siberia seem to suit its habits exceedingly well, as it is found there to be at home and plentiful. During the most inclement season, it comes southward as far as the Caspian Sea, and the north

of Scotland, but only accidentally lower; and on the continent of Europe it is very rarely seen further south than before mentioned. The locality the Phalarope frequents by preference, is invariably the sea, from whence it only departs during the breeding-season, to the rivers and lakes in its nearest vicinity; it has very frequently been met with at sea by mariners among floating icebergs. Its principal time is spent on the water, swimming, which it performs with ease and grace, nodding its head at every stroke of its legs, and when it runs about on the shore, it resembles the sandpipers in every movement, but owing to its thick feathering the Phalarope looks much larger than it in reality is. We are enabled to state from experience, that its flight is exceedingly quick, and will fairly be a match for a snipe. The note uttered by the Phalarope is best expressed by the word *pick*, *pick!* uttered in a quick and high tone.

The food of the Phalarope consists in insects of the smaller kinds, most probably those that are found on or near sea-weeds; gnats, and their larvæ.

In the month of June several instances are named of the Phalarope having come to breed near ponds and small lakes in Iceland, Norway, Sweden, &c., but never far distant from the sea-shore; the bird deposits her four eggs in a hollow on the ground, the nest being carefully lined with a few grasses, or formed among the short herbage present; the parent birds are very much attached to their young, and remain with them until they are fully fledged, and able to follow them to the sea-shore.

The entire length of the Phalarope from the tip of its beak to the extremity of its tail, is eight inches and a quarter, the expanse of its wings fifteen inches, the wing from the carpus to the tip, five inches four lines; the tarsus one inch.

In the plumage of the adult bird in summer, a dusky

hood extends from the beak, over the top of the head towards the nape, the chin and throat are also dusky; the space between the beak and the eye, a circle round the eye, the upper half of the cheek and the nape are white; the back of the neck, lower half of the cheek, sides, and front of the neck, breast, belly, vent, and under tail-coverts are uniform red brown; the back, scapulars, and rump dusky black, with ochre yellow margins to the feathers; the lesser wing-coverts lead colour edged with white; greater wing-coverts darker lead colour, more broadly edged with white; tertials, the same, but edged with reddish yellow; quills and tail black; the legs and feet are greenish yellow; claws black; the beak yellow at the base, and black at the tip; eyes dark chestnut brown.

The adult in winter plumage has the beak black; the forehead, top of the head, cheeks, chin, front and sides of the neck, breast, and all the under parts white; a beautiful pearl grey under the shoulder of the wing, which fades into the white of the breast; on the sides and upper tail-coverts are a few longitudinal pale cinereous dusky shaft streaks faintly marked; on the top of the head is a black patch; the back of the neck, the back, and scapulars are of a clear gull grey, the wing-coverts are greyish black, margined with white; the shoulder of the wing, the quills and tail-feathers are black; the eye brown; the legs pale olive coloured, the claws black.

The legs of the immature birds are grey, with buff-yellow borders to the webs of the toes; the feathers surrounding the beak are tinged with ochre yellow, and the same colour is slightly visible on the cheeks and the upper part of the breast; the feathers of the back, scapulars, tertials and upper tail-coverts are dusky, with pale buff edges.

The egg figured 211 is that of the Phalarope.

PLATE CCXII.

RED-NECKED PHALAROPE.

PHALAROPUS HYPERBOREA.

The Red-necked Phalarope is occasionally met with in England, but according to several accounts these birds are more plentiful in the north of Scotland and the Orkneys, where they also breed. The present species is more generally and plentifully met with in the higher northern latitudes, as its trivial name implies, and belongs in fact to the north and north-eastern parts of Europe, the north of Asia, and North America. In Iceland, Greenland, and Lapland, this bird is very common, from whence it retires on the approach of the more inclement seasons to the coast of Scotland, the northern lakes of Russia, the Baltic, and occasionally to Holland, France, and Germany.

The localities it frequents in general are the sea-coast and the smaller islands or lakes, but inland rivers, ponds, or swampy places have not been named in a single instance as situations where it has been obtained or even seen. On the open sea, many miles from the land, many instances are on record of its having been noticed; it has there invariably been seen constantly employed in dipping

its head in the liquid element in search of insect food, on which it subsists and thrives excellently; the small soft worms that exist in such great numbers about sea-weeds, seem the chief prey of the Red-necked Phalarope; on the sea shores it likewise looks for them among the sea-weeds: flies and gnats that hover over the surface of the water, or wet ground, it also greedily consumes.

A very remarkable circumstance is recorded by a continental ornithologist, M. Faber, who states that he has seen the present species swim on the surface of some of the hot springs in pursuit of insects, where the temperature of the water was such that he could not keep his hand in it.

The reproduction of the species takes place in high northern latitudes, on the shores and banks of inland seas, lakes, ponds, &c., not only in flat situations, but among the hilly parts; like the sandpipers they lay their eggs, four in number, in a hollow among the short vegetation of the place, or beside a small tuft of herbage; the nest is very carelessly lined with a few blades of grass, &c.; these birds appear very much attached to each other, and afterwards equally so to their young brood, but, like many other birds, the males constantly fight for the possession of a chosen spot, although the nests are seldom far apart.

The dimensions of the Red-necked Phalarope are much less than those of the foregoing species, the female is, however, the larger bird in both; its entire length is seven inches, the wing, from the carpus to the tip, four inches three lines; the beak ten lines and a half.

This species is very expert in swimming, and its flight is quick and strong. On the ground its course is graceful and animated, very elegant, and much like that of the sandpipers.

The feathering of the adult male in summer is as follows: the crown of the head, the nape, and hinder part of the neck, sides of the breast, and a streak behind the eyes, slate coloured; on the sides of the neck is an irregular spot of bright orange brown, forming a sort of collar; the throat, middle of the breast, belly, and vent, are white; the flanks are streaked with pale ash colour. The back and scapulars are black; the feathers all margined with ash grey and brown ochre; the wing-coverts are blackish grey; the greater coverts tipped with white, which forms a bar across the wing. The two middle tail-feathers are black, the others slate colour, edged with white; the beak is black; the legs and toes greenish grey; eyes brown. The female is very much like the male, but the colouring not so bright, and the brown on the side of the neck not so brilliant.

The plumage in winters differs very much, and must be described as follows: the forehead, streak over the eye, chin, throat, breast, belly, vent, and under tail-coverts white; the top of the head, the nape and the border of the ear-coverts are blackish grey; the sides of the neck and breast are grey, with a purplish hue; back, scapulars, and wing-coverts are black; the feathers of the first being edged with brown ochre, the rest with pearl grey; the greater wing-coverts are tipped with white, which produces a white bar across the wing; the quills are black; the beak black; the legs and feet greenish grey.

The young or immature birds have the top of the head black, the back black, with brownish yellow edges; all the under parts white; the beak and legs the same as in the adult winter plumage.

The egg figured 212 is that of the Red-necked Phalarope.

PLATE CCXIII.

COOT.

FULICA ATRA.

The Coot is of common occurrence in these islands, arriving in large flocks for the winter, from the more northern latitudes ; many remain with us during the year, and breed in numbers on divers large ponds that are supplied with reed-beds. In the south of England the numbers are greater than in the northern counties or Scotland, and towards the approach of winter they generally migrate southward, not only from Scotland, but from other northern parts, such as Sweden and Denmark, when their numbers increase in Norfolk, and south of that county to a very great extent ; at that time of the year, namely, during the months of December and January many persons go in pursuit of this bird, but it is so exceedingly watchful, that it requires great caution and management in order to approach it within gunshot. The geographical range of the Coot is very extensive ; it inhabits more particularly the moderate temperatures. In Europe it extends not farther north than central Sweden, and in Asia, only to the southern parts of Siberia. In America it does not go beyond the southern borders of Canada,

from thence, however, as far south as Brazil, and it is also found in Jamaica and most of the West Indian Islands. In Africa it is known, from north to south, but the greater numbers are met with in Europe and Asia.

In the fall of the year the numbers that congregate in some counties for the purpose of migration are not only hundreds, but several thousands. In the months of October and November, the autumnal migration is carried on, and in March and April they return again. A black mass of these birds at such times literally covers some lakes and ponds to a great extent; when they take wing, or are on their journey, the birds may easily be distinguished from ducks by their irregular and disorderly arrangements of flight. The Coot travels by night, starting about dusk, and settling in the best locality at hand at day-break, which accounts for its irregular appearance on ponds from one day to another. In some instances a flock may be found on the surface of some snug inlet of the sea, although it does not prefer the sea if inland water is within reach.

Early in the spring of the year, when the evening is very still, and the moon bright, these birds may be heard flying over and uttering their call-note, and if one has the patience to wait for an hour longer, the larger flights are almost sure to follow the forerunners; these birds being among the first that travel northward are, as it were, giving notice of the approaching mild weather of spring, and are therefore very interesting to the observer of nature.

The principal locality chosen by the Coot, is still deep water where large beds of reeds and rushes grow either in patches, or surrounding the margin of the water, and there the bird is constantly swimming about either among the rushes, or near to them; it does not often come on shore unless some strip of land extends far into the lake or pond.

The sea and open rivers it does not frequent, for want of the reedy concealment in which it delights.

The roosting-place of the Coot is on a tuft of grass or reeds as far from the shore as can be found, on which it either stands on one leg, or squats; the only way to approach it is in a boat, and then even great silence must be preserved. When the bird is by chance seen to walk on the ground, its appearance is not very elegant, owing to the formation and backward position of the legs, and the attitude it necessarily requires to keep its balance, which is by carrying its breast high, back arched, and tail lowered; in running it is obliged to take long strides, in order to prevent treading on its own long toes; but the strides when quickened by fear increase its speed most wonderfully.

When an enemy approaches while the Coot swims on open water, it stretches its head and neck out at full length, aids its course by flapping its wings, and runs on the surface of the water with its pattering feet, thus producing an incredible noise. Where many of these birds are acting in concert, the sound may better be fancied than described.

When pursued by a dog, it dives readily, and swims under water to a great distance; on reaching the reedy cover, it takes hold of the stalks of the plants under water, and only stick its beak out for air, until the danger is past; and it thus becomes very difficult for dog or man to find it again. We need not add that the present species is very shy, but experience has proved that it may soon be tamed in confinement where the required surface of water can be enclosed, and food be provided, among which corn is a great ingredient; under such circumstances, it thrives very well, and lives for a length of time.

The call-note of the Coot is very peculiar, and may be heard at some distance, it sounds like *kew*, or *crew*, it is

either uttered singly or several times in succession, when it almost sounds like the barking of a small dog; the young birds pipe like young ducks.

The food consists in water insects, their larvæ, and divers aquatic vegetable productions, such as buds, flowers, and seeds; neither fishes nor frogs have been found in the stomach of the Coot, but corn of several kinds, which it obtains during the quiet hours of the night. During the spring of the year the bird dives very frequently when in pursuit of food, which is attributed to the aquatic vegetation not having reached the surface of the water.

In the month of March the reeds and sedges have not attained a sufficient height for the cover of a nest, and consequently the Coot chooses some last year's tuft that has remained untouched by the hand of man, and in many cases the formation of a nest is deferred until May. From the time of their arrival the birds begin to fight among themselves for the preference of some chosen spot; when several pairs, however, find shelter in a place proper for the purpose, the fights of the male birds are thus constant; in some instances, the females join in the same until they begin to lay their eggs. The foundation of the nest consists generally of the stumps of last year's rushes that are just level with the water, and the tallest are then bent down to a centre, and interwoven by means of thinner herbage; frequently it is placed on some floating bunch of rushes, or even entirely constructed of floating materials, where the surrounding rushes prevent it from drifting: the size of the nest is about eighteen inches in diameter, to a foot in height, the interior cup is just deep enough to hold the eggs, and sufficiently well constructed to keep them dry. About the time that the nest is made, the surrounding reeds have attained a sufficient height to allow the nearest to be bent

down over the nest, and they thus form a perfect umbrella or hood, which shelters it from view, and also keeps out the rain.

The number of eggs ranges from seven to fourteen in one nest, and as we figure the egg of the natural size, and from a very good specimen, we shall not describe it further. In three weeks the young brood make their appearance, they are covered with a dingy black down, with a reddish-brown head; they leave the nest as soon as they are dry and follow their parents in the thickest parts of the rushes.

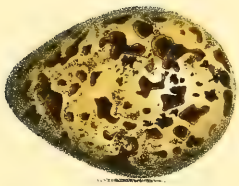
On the least approach of danger they become silent, but at other times they are incessantly calling out. The parents express much care for their young; the mother feeds them while the father more generally watches for their safety. When the weather is cold or raw, the young return to the nest for a week or two to roost, and when a nest gets disturbed, the eggs or young destroyed, the parents make invariably a new nursery and lay for the second time, but hardly ever more than eight eggs. The flesh of the Coot is not very good either in appearance or flavour, and therefore unfrequently sold in the market for the purposes of food.

The dimensions of the adult Coot are as follows: entire length sixteen inches; the wing, from the carpus to the tip, eight inches; the beak measures one inch ten lines; the tarsus two inches two lines; the middle toe three inches three lines.

The head and neck are black; the back, wings, wing-coverts, tail, and all the upper parts black, with a tinge of deep ash-colour; the under parts are deep ash-grey; on the front of the head is a white patch of a substance like kid leather; the beak is white, tinged with carmine; eyes pure carmine-red; the legs and toes are cinereous-ash, with

a tinge of olive at the joints and borders of the webs of the toes; the tibia is bright orange and carmine red. The male and female are alike; the young are much paler in colour, and the frontal plate on the head is smaller.

The egg figured 213 is that of the Coot.



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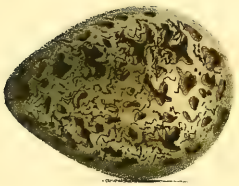

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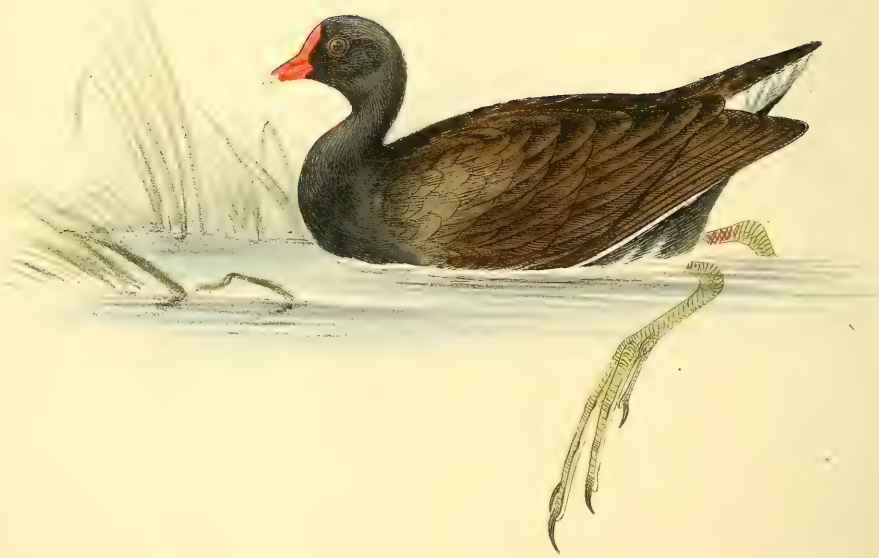


PLATE CCXIV.

MOOR-HEN.

GALLINULA CHLOROPUS.

The Moor-hen is a common and half-domesticated inhabitant, throughout the year, of almost all our rivers, ponds, streams, and lakes, preferring slow streams and still water to rapids, and the shelter of flags and sedges to open ground.

Throughout Europe, from Siberia to the most southern extremities it is also plentiful, but in Denmark and Sweden it is not frequent; we may therefore conclude that the milder and warmer climates suit its habits better than the cold. In Africa the Moor-hen is met with by most observing travellers as far south as the Cape.

During the summer months this bird frequents our inland rivers, ponds, and most of the quiet water-courses, but during frosty weather it is driven from some of them by the ice, and resorts naturally to the sharper streams or very sheltered creeks that remain open.

During the winter it is very amusing to go in search of the Moor-hen, particularly when the water is open and the sedges half decayed, as the bird generally runs for shelter under some root of a willow or alder that grows by the side of the water, and remains for a considerable time in its safe retreat just out of reach of a dog, who cannot easily dislodge it in any other

way than by its frantic gestures. When the bird flies off it is easily shot, as its flight is slow, and in a straight line over the surface of the water. In diving it is very expert, and it also runs with ease over the aquatic plants; the water being its usual place of resort, swimming comes naturally to it.

The food of the Moor-hen consists in worms, slugs, and aquatic insects, which latter it is in pursuit of during the entire day, swimming among the broad leaves of the water-lilies; and towards the evening it runs about on the meadows in search of worms, slugs, grasshoppers, &c.

Throughout the month of March the noise that the Moor-hen makes towards the dusk of the evening in sport, while chasing its mate and fighting for its partner, is very peculiar and incessant, much resembling the bark of a small dog; and they are so much engaged in this pastime, that they continue it even while a spectator is looking on. The nest, which is composed of sedges, and either placed among the thickest parts of the reeds or among the intricate, exposed roots of trees that grow on the banks, is generally very well concealed, and just above high-water mark; it is very well and strongly constructed, and contains from seven to eight eggs, and sometimes more; we remember taking two nests in one day, the one having nine and the other ten eggs, these nests were both placed among the roots of trees on the banks of the river Mole, between Esher and Cobham, in Surrey.

The Moor-hen is a very ornamental bird on the water, nodding its head very gracefully at every stroke of its legs, and its appearance indicates the retired quiet of the country; for its timid nature scares it within cover on the least approach of noise, and it very soon leaves its haunt if the busy din of men encroaches on its territory.

The length of the Moor-hen is thirteen inches, its wing, from the carpus to the tip, six inches nine lines.

The colouring of the plumage is apparently black, but on closer inspection very rich and beautiful; the head, neck, breast, and sides of the body are deep purplish-grey, the belly and vent are dirty white, under tail-coverts clean white, and the sides and thighs streaked with white; the back, wings, rump, and tail, are very dark brown, with a tinge of olive, that appears very rich, owing to the silky texture of the feathers; the beak is of a delicate greenish yellow, the base of which is beautifully ornamented with bright red, that extends to the forehead; the eyes are dusky, and the legs and feet pale mellow green, with a bright red band around the naked part of the tibia; the toes are ornamented with the requisite scaled fringes that aid the bird in swimming and diving.

The egg figured 214 is that of the Moor-hen.

PLATE CCXV.

OYSTER CATCHER.

HÆMATOPUS OSTRALEGUS.

The Oyster Catcher is indigenous in Great Britain, and very plentiful where the locality suits its habits; it is also met with on most of the European sea-coasts, from the most northern latitudes to the Mediterranean Sea, and along the Atlantic Ocean as far as Senegal. In Asia it is less frequent, but in America it ranges from the Hudson's Bay as far south as Bermuda. The sea-coasts of Iceland, the Faro Isles, the Hebrides, Norway, Denmark, Sweden, Holland, France, and Spain, are its chief haunts, where the bird occurs in great numbers; the isles on the west coast of Jutland are very numerously inhabited by the Oyster Catcher. About inland rivers and lakes it is now and then seen, but only occasionally, and under peculiar circumstances.

The Oyster Catcher is generally considered to be a migratory species, but it seems not to leave Iceland at any time of the year altogether, and only retires from its northern to its southern extremity during the most inclement seasons of the year, and the same circumstance may be observed in Great Britain. In the Baltic it is said to arrive in the

spring and depart in the autumn, as soon as its young become full grown and have moulted. About the end of August it disappears, and this migration of the most northern continues no longer than the month of October; by the end of March and April it returns to its breeding-ground. During the time of migration the flocks amount sometimes to several hundreds, which fly in the same manner as wild geese, being headed by one bird, and extending in two opening, slanting lines; they fly at that time at a great elevation, as well during the day as the night season. The clatter of their voices may generally be heard at a great distance, and is by far more clamorous when they fly in an irregular manner, which sometimes happens through some accidental disturbance, than when their flight is performed in the beforementioned regular order.

That the principal locality inhabited by the Oyster Catcher is the sea-coast is already sufficiently explained, but we have to add that the favourite ground on which the bird passes its time during the day, is where a soft black surface of mud covers the sandy or stony bottom thinly; or where scant patches of grass and marine vegetation are intermixed with humid spots, and the ground here and there broken by the ebb and flow of the tide.

During high water the bird passes its time on the nearest meadows or cornfields, but as soon as the tide turns it seeks the newly-furnished, uncovered flats, where its table is again richly supplied with food of great choice.

The general appearance of the Oyster Catcher is peculiar and rather handsome, and for its usual attitude we must refer our readers to our Plate. When on the ground, it runs like the sandpipers with easy and short steps, although it is well able to run fast if required; it swims readily, but to no great distance, and dives when danger prompts it to do so.

On the wing this bird is very strong; it beats the air in the manner of ducks, and sails a short distance just before alighting. The Oyster Catcher is a lively bird, and fond of playing not only with its own species, but also with sea-gulls and terns, besides which it frequently fights for the possession of a mate, a chosen breeding-place, or food; attacking under such circumstances much larger birds than itself, and driving them from the ground.

The present species is very shy and watchful, so that a person can very rarely approach it within gun-shot; it is at the same time on very good terms with harmless persons, such as shepherds; it feeds morning, evening, and during the night, and roosts most generally during the middle of the day, standing on a stone, shelf of a rock, or bank, sometimes resting on one leg and sometimes on both; trees of all descriptions it avoids for fear of being surprised, and consequently never perches by any chance.

It is a well-known fact that the Oyster Catcher is not only a very hardy bird, but as tenacious of life as a cat, for when one of them is brought to the ground by a gun-shot, which lacerates its wing ever so much, it may most generally be kept alive in confinement for a great length of time, and the wound heals without much trouble.

The sociability of the Oyster Catcher is equally remarkable; they are very rarely seen singly, and about their breeding places they not only have their nests in numbers close together, but intermixed with those of gulls, terns, avocets, redshanks and divers other species. Besides their sociability they may probably induce other birds to make their company serviceable to themselves, for the Oyster Catcher is the first of the party who notices not only the approach of enemies, but who also attacks them and drives them from the neighbourhood by means of blows with their

strong beaks: this occurs where the enemy is a rook, crow, or skua.

The call-note of the bird in question sounds much like the word *quip* or *whip*, uttered in a very high tone, and repeated several times when on the wing: the concert is generally begun by one bird in a moderate *tempo*, which increases to *allegro*, and finally *presto*, *presto*, being joined by an increased number of voices until all unite in the chorus.

The Oyster Catcher is very easily kept in confinement, and when it is obtained young may be made perfectly tame, and kept at large in company with ducks and fowls, as it will roost with them in the outhouses.

The food on which the bird subsists in a natural state is reported to be oysters, from whence its name originates, but it remains a question whether its beak is sufficiently strong to open the shell of a living oyster, provided the bird could even dive for such prey; the most probable truth is, that when chance puts an oyster in its way and the shell is open, the bird may draw the contents of the shell out and eat them. Muscles are frequently devoured by the present species, as the remains are found in the bird's stomach, and so are divers shell-fishes, worms, and marine insects, which it finds among the pebbles that are below the soft mud, and which it turns up and grubs among with its strong beak. In pools, where crustacea and small fry are in abundance, the bird also passes much of its time. In spots where the shore-worm (*arenicola lumbricoides*) is so numerous on the retiring of the sea-water that numbers may be trodden to death at a time, the Oyster Catcher is most abundant, and its strong beak may be provided for the purpose of drawing these insects out of the hard sand into which they retire on the slightest noise. In confinement there is no

difficulty in supplying this bird with food, as it consumes bread, meat, and cooked vegetables, or rice, besides which worms and snails whenever they come in its way.

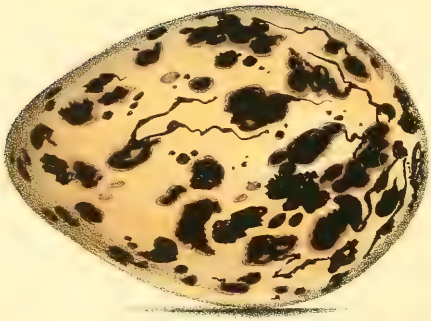
The nest of the Oyster Catcher is most generally placed on short grassy meadows or banks, just above high water mark, and consists in a rounded hollow, scratched by the bird in the ground and furnished with a few blades of grass as a lining; in it the female deposits two or three eggs; on which she only sits during the night; after three weeks the young come forth, and run about with their parents as soon as they are dry. It is not difficult to catch the young shortly after they are hatched, but they acquire very early the knowledge of running to the water, to swim, dive, and even to run a short distance under water for safety, so as to get out of reach, not only of men but of a dog.

In consequence of the anxiety the bird shews for her eggs she generally approaches a sportsman within gun-shot during the breeding season and becomes an easy prey; the young birds leave their birth-place in small companies as soon as they have finished their moult, and in August their parents follow them in like manner to milder regions for the winter.

The Oyster Catcher measures about sixteen inches and three-quarters to seventeen inches in length, the wing from the carpus to the tip ten inches and three-quarters, the beak two inches nine lines; tarsus one inch eleven lines.

The colours of its plumage are, of the head, neck and upper part of the breast deep black; the back, wings, and tertials the same, with a reflection of bluish-ash colour; the quills are dusky, as also the tail-feathers from half way down to their tips, the basal half is white, the under parts are all pure white, as well as the rump and upper tail-coverts;

214.



215.

the broad white tips on the greater wing-coverts form a very broad band across the wings; the beak is orange-yellow; the eyes crimson-red, and the legs and feet purplish flesh red; claws dusky.

The male and female are alike; the young only differ in substituting the black for dusky, the feathers being edged with a lighter tint, and the parts which are white in the adult are much tinted with sooty grey in the young.

The egg figured 215 is that of the Oyster Catcher.

PLATE CCXVI.

TURNSTONE.

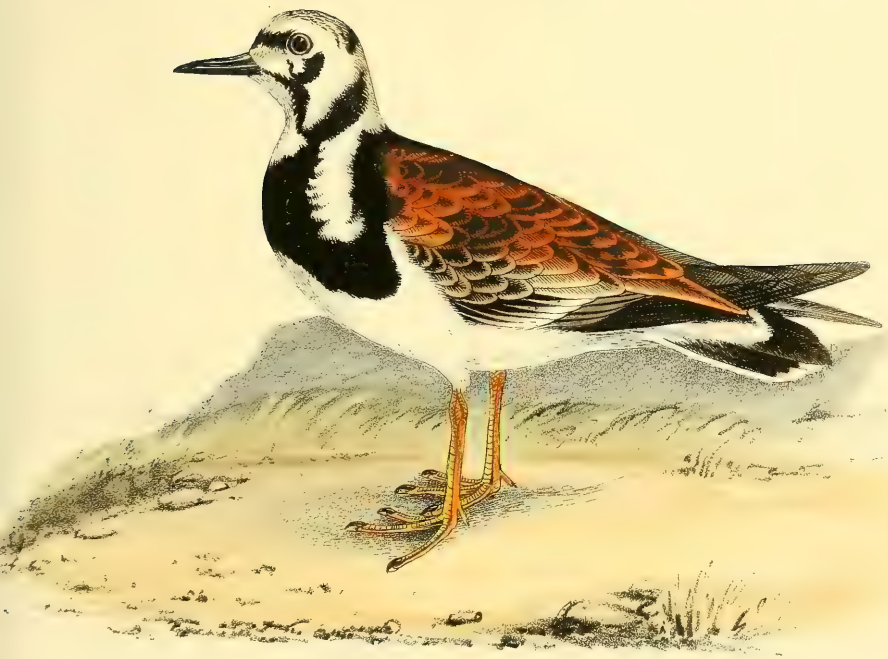
STREPSILAS INTERPRES.

The Turnstone is a winter visitant in Great Britain, arriving on the sea-coast during the month of August, and departing again northward by the beginning of May for the purposes of breeding in more solitary localities.

The geographical distribution of this bird is very widely extended, as it inhabits periodically all the sea-coasts of Europe, Asia, Africa, and America from Greenland to the very south. In Iceland, the Faro Isles, and Norway, it is plentiful and well-known. In the inland parts of Continents the present species is never found, or only occurs during its autumnal migration to the south, and birds so met with are chiefly single or at most to be seen in pairs, and have rarely proved to be other than young birds that are driven inland by gales or stormy weather.

In respect of migration the Turnstone differs greatly from the Oyster Catcher by journeying during the night only, and in pairs, but very seldom even in small parties, and always following the sea-coast; this bird is also irre-

Pl. 216.



gular in its return to any given spot where it has been the previous year.

The chosen localities are sandy shores, or shingly and rocky coasts, here and there covered with sea-weeds, but on black soft muddy shores it is never seen; it also seems partial to short, grassy, heath-covered shores during the breeding season.

The general appearance of the Turnstone is very handsome, owing as much to its figure as to its gay apparel; its motions on the ground are graceful and dexterous, it runs much like the Lapwing, every now and then stopping short to rest or pick up food, especially when it has reached any elevation, either large or small; it is able to run very fast, and does so when pursued before it takes wing; its flight is elegant and quick, performed generally with half-extended wings that are considerably curved; its evolutions are very dexterous, skimming either close over the water or the ground, and rising high in the air it seems to depart, when, on a sudden, it returns again to the spot.

In its nature it is sociable among its own species, and among other sea-birds; but it is one of the most shy towards man, and can consequently only be shot from some hiding-place during its stay with us.

The food consists in marine insects and their larvæ, which it obtains by turning up the pebbles and stones with its wedge-shaped beak; where one or more of these birds have frequented a certain spot on the shore, the number of stones that have evidently been turned over is considerable; and this circumstance is the origin of its name; it feeds also on marine sand-worms and small crustacea, and during high water it takes beetles and worms from the meadows that skirt the shore.

The bird is very easily tamed, and may be kept in confinement on Bechstein's universal paste.

The place chosen for breeding by this species, is generally some sandy shore where heath-plants, and in particular juniper bushes, grow, and also on sandy and rocky coasts where the ground is bare of vegetation altogether; it is remarkable, however, that the Turnstone has no fixed choice of locality, inasmuch that where several of them are seen one year, they are known to be entirely absent the next, and so *vice versa*.

The nesting-place is sometimes formed under the shelter of some plant, stone, or abrupt corner, and at other times, quite open on the bare sand or small broken stones; it consists in a shallow depression, sparingly lined, if at all, with a few blades of grass or bent, in which three or four eggs are deposited, which are smaller than those of the lapwing, and when fresh, greenish olive in colour, marked with spots and streaks of dark ash colour and olive-brown or black; some specimens are much, and others little spotted, but most about the large end; these eggs differ consequently very much in their markings, and are more brownish-olive in collections than green, owing to the changeable nature of the colours upon egg shells.

The parent birds are very much attached to their brood, and greatly contribute to their being found out in consequence of their noisy behaviour on the approach of danger, since their cries are frequently heard by the intruder long before the birds themselves have been observed. In August, when the young are full grown, they leave their birth-place with their parents, following the sea-shores southward as before mentioned, for their winter quarters.

The present species measures about nine inches in length, its wings six inches; tail two and a half; and the spurious wing nine lines long by one in width, being therefore very pointed.

The colouring of its feathers differs so much in different stages, that we need not be surprised that some ornithologists have mistaken them for different species. The adult birds (male and female) resemble each other perfectly, and are not to be distinguished from one another.

The feathering of the head is pure white in the spring of the year; from the forehead extends a velvet black streak over the eyelid, which lowers itself close to the eye, and unites directly below the eye with another that originates at the base of the lower mandible, and encircling the throat, extends backwards below the cheeks without reaching the neck; from the throat below this, extends around the neck to the back a very elegant sweep, forming a full black collar that descends over the entire front and sides of the upper part of the breast.

On each side of the nape is also a small black patch, and the top of the head is ornamented with black shafts to the feathers. The upper part of the back is black, intermixed with rust-coloured feathering, forming irregular rows; the upper shoulder-feathers are bright rust-colour, with black shafts, some below them are black, with rust-coloured, yellow and white edges, the rust-colour extends over most of the wing-coverts and tertials; the lesser wing-coverts are dusky, with pale edges, the larger broadly tipped with white; the back, rump, upper tail-coverts, and all the under parts, are pure white; the two middle tail-feathers are dusky, the rest dusky, excepting the outer feather and the tips, which are white; quills dusky, with white shafts at their base. The beak is black, the eyes dark brown, and the legs bright orange red.

The young birds of the year have the entire plumage of the upper part of the body dusky, as well as the front of the throat; the back feathers are edged with pale yellow, and

those of the wing-coverts and tertials edged with rusty yellow; the chin, breast, belly, vent, and under tail-coverts white; the legs and toes are yellowish flesh-red; the beak bluish black; eyes dusky.

The egg 216 is that of the Turnstone.

PLATE CCXVII.

CRESTED LAPWING.

VANELLUS CRESTATUS.

The Crested Lapwing or Peewit is known all over Britain, and is indigenous with us; it is a very interesting species, and not only considered good for the table in itself, but its eggs are so generally admired as a dainty relish, that the traffic in them is a great source of support to many country folks, and profitable to the shopkeepers of most towns. The plumage of this bird is besides exceedingly beautiful, and may challenge that of most other species.

The geographical distribution of the Crested Lapwing extends over Europe, Asia, and Africa; in Europe and Asia it is not only plentiful but in some parts very numerous; it inhabits Siberia, Persia, and China, Egypt and Nubia: and in Europe extends from the southern parts of Iceland to the Mediterranean, although its numbers are small in Norway and Sweden. In Great Britain, Denmark, Prussia, Germany, and Holland it is remarkably plentiful, especially in the latter country, owing to the marshy nature of the land.

Its principal locality is low wet ground of all descriptions, preferring the temperate and milder climates during the winter, and the more northern during the breeding season.

The numbers of this species appear considerably greater in the spring and autumn than at other times, owing to their assembling in companies for their migrations. The months of February and March are the usual time for the spring migration, varying a week or two, according to an early or late spring; and in October and November they return southward in flocks of hundreds together.

In the south of France, Italy, and Greece great numbers reside during the winter; Sardinia also is a very favourite haunt during that time of the year.

The migratory movements of the Crested Lapwing are more usually performed during the day than the night, and at a considerably high elevation, keeping close together and moving on without any regular order. It is very interesting to watch these birds on the wing, as they wheel and turn about so exactly at the same moment that it appears as if they were under the command of a military leader; shewing thereby all their predominant colours at the same instant.

This bird is restless, watchful, and very shy, avoiding therefore all cover of trees or plantations; it rarely approaches buildings, and alights consequently in the most open and extensive meads and wastes. When a gun is fired within hearing of the Lapwing it is very difficult to approach it for a length of time within range, the experienced sportsman resorts thus to lying in wait for a flock under the shelter of a hedge or embankment.

When engaged on the ground in pursuit of its food, the Crested Lapwing carries its body in a horizontal di-

rection, standing on high or straight legs, and inclining its head downwards; it runs with ease and velocity. Before it takes wing it lengthens its neck, and with a spring raises itself from the ground; on alighting it precipitates itself with a rolling motion, and skims before touching the ground.

Sociability is one of the virtues of this species, as may be gleaned from their keeping together, which they also practise during the breeding season to a much greater extent, for on the approach of an enemy they aid each other in mobbing even the larger birds from their neighbourhood, and thus watch not only for their own safety and that of their nest and young, but also for that of every member of their congregation in concert. When the party roosts, during the middle of the day, some remain awake in order to give due notice of danger, and on the alarm note being given they all take wing in an instant.

The Lapwing is very careful of its plumage, keeps it always in good order, and very frequently oils it all over with the secretion of fat near the tail; the result of this is that rain-drops invariably run off its plumage. The process the feathers undergo during the performance of greasing is very beautiful to watch; the beak being supplied with the oil, the feathers are carefully drawn through it, and lastly the head is also rubbed by laying it backwards and smoothing the plumage in general.

The principal food of the Lapwing consists in worms and insects, beside the larvæ of many species that are found in abundance on meadows and pasture lands. One means practised by them of obtaining worms in the morning early is by looking for worm casts, and treading the ground around them in order to induce the worm to show itself, when by its dexterity the bird is almost certain to catch

it. Morning and evening are in general the usual times of feeding, which is continued also during moonlight nights.

The nest of the present species is always on the ground, among grass or other short herbage in open situations, commons, and meadows, provided there is water near at hand. This summer we have been greatly amused by two pair of these birds, which had their nests among some wheat that had been much swamped, and consequently had become stunted during the spring; the birds were daily seen hovering over the place, calling their well-known cry of *peewit* whenever a man or dog came within sight, and the playful evolutions that were performed over the river in the evening and continued till dark were extraordinary, and elegant in the extreme.

The four eggs (the invariable contents of each nest) are hatched in fifteen or sixteen days, and the young run about as soon as they are dry; at first they are only clothed in down, but in a fortnight the quills appear among it, and they then resemble unsightly porcupines on high legs.

The Crested Lapwing measures full twelve inches; the wing nine inches; the beak ten lines and a half; the tarsus one inch ten lines.

The colouring of the beak is black, the eye brown, and the legs and feet transparent red-brown; the claws dusky.

The plumage in summer is as follows:—The head is ornamented with a pendant crest, which the bird generally carries on a line with its beak, but which can be raised at pleasure in a fan shape around the back part of the cranium; these feathers are black, as are also the top of the head, the entire front of the face surrounding the base of the beak, the chin, fore part of the throat and entire upper part of the breast; the rest of the head and neck are pure white; the back, scapulars, wing-coverts, and tertials are deep bronze-green, with rich

reflections, including most of the colours of the rainbow. The quills are dusky, with the exception of the first four, which are tipped with white; all the under parts are pure white; the upper and under tail-coverts pale orange-brown; the tail-feathers are white half way down from the base, the outer entirely so, and the rest tipped; the other parts of these feathers are dusky.

In winter plumage the throat is not so entirely covered with black, and the rest of the colouring is duller.

The young of the year has a dusky streak below the eye, instead of the black; the throat is white, with ash-coloured and brown markings, the entire plumage is edged with brown ochre; the legs and feet are greenish ash-colour.

The egg figured 217 is that of the Crested Lapwing.

PLATE CCXVIII.

GREY PLOVER.

SQUATAROLA CINEREA.

The Grey Plover is chiefly an autumnal visitant with us, although some few remain with us during the year. It is a more northern and north-eastern bird in Europe than the foregoing species. In Iceland and Norway it is unknown, whereas it is frequent in Siberia and the northern provinces of Russia, equally so in North America as far as Hudson's Bay. Towards autumn it travels southward to pass the winter; and descends in America as far south as Louisiana, and in Asia it extends to Java. During its autumnal migration it visits the Baltic, and the shores of the northern ocean through Pomerania, Holstein, and Holland, where it is by no means rare; its winter quarters in Europe are the south of France, Spain, Italy, Sardinia, and the Grecian Archipelago.

This species, being chiefly an inhabitant of the sea-shores, is very rarely met with inland, except during its migration in the autumn; on the west coast of Jutland and the neighbouring islands the birds occur in troops of hundreds during the spring and summer, as late as June, many ap-

parently paired, and of course in their matrimonial livery. By the end of August these birds return there again from the north, but the general migration continues through September, October, and November, until snow and frost hurry them to the south. The greater numbers that occur on the coast of the Baltic and in Holland in the autumn are believed to have come from the coast of the White Sea, and to be only resting there on their way towards their winter quarters.

The most extensive flat shores are the chosen spots for the Grey Plover, provided low meadows and marshy lands are within reach, on which it passes most of its time during high-water, and returns again to the sea-shore, like most of its family, as soon as the waves retire. It frequents also those shores where heath plants are the only vegetation. Hilly and rocky coasts, or parts where trees abound, it avoids entirely.

This species feeds morning and evening, and roosts during the day time, either standing or squatting on the ground, and its migratory flights are performed during the night time.

The food of the Grey Plover is chiefly worms, beetles, and their larvæ, which it finds on meadows, wastes, &c., and marine insects, shore-worms (*arenicola lumbricoides*), and the softer shell-fishes, which it obtains on the sea-side, from among the sea-weeds and muddy spots. Like the golden plover the present species devours berries of the genus *Vaccinium* and *Empetrum*.

In confinement the Grey Plover thrives very well on bread and milk, intermixed with a few worms and meat.

The general appearance of the present species is peculiar to itself; it walks about on the ground slowly and with grace, and stops every now and then to pick up its food; it

carries its body in a horizontal position on straight legs, and its head very close to its body, consequently increasing the thick appearance of the head.

Its flight is like that of the golden plover, and very quick, but it mostly opens its wings above its body before it starts, and thereby shews the black colour of its breast to great advantage. It flies frequently near the ground, but during its migration it travels at a great height in companies forming two lines, headed by one bird; the lines extending to the right and left: this species also flies faster than any other of the plovers.

The adult birds of this species are very watchful, and do not allow a person to approach them within gun-shot; young birds are not so difficult to approach, and sometimes during the middle of the day, when they roost, they are so drowsy that it is easy at that moment to steal upon them.

The nature of the Grey Plover is sociable, not only towards its own species, but to every other coast-bird; when a party of them either go towards the shore or leave it for the meadows and flat wastes, they unanimously keep together, but when alighting, they mix with every other species, and thus produce a motley group.

The call-note is very much like that of the golden plover, expressed somewhat like the word *tleewee* or *gleewee*. When this species is obtained alive, either in a mature or young state, it soon becomes tame, and lives for a length of time.

The reproduction of the species is supposed to take place in the most northern climates, but respecting the nest and eggs nothing certain is as yet known.

The Grey Plover measures eleven inches and a half, the beak, one inch; the wing, seven inches eleven lines; the naked part of the tibia, ten lines; the tarsus, one inch eleven lines.

In summer, the space from the base of the beak, the chin, throat, front and sides of the neck, breast, and belly, are black; the forehead, streak over the eyes, sides of the neck and breast pure white; the thighs and vent, including the under tail-coverts, the same. The crown of the head and occiput are grey, spotted with dusky; the shafts black; the nape brown, black, and white: all the upper parts black, each feather broadly tipped with white; the tertials and wing-coverts are barred with white; the quills dusky; the beak black; legs blackish-grey; eyes dusky.

In winter the forehead, chin, neck, sides of the breast, and flanks are white, spotted with brown and grey: the head and all the upper parts are dusky with grey edges and tips to the feathers, the belly, thighs, vent, and upper tail-coverts are white; the tail white, transversely barred with brown, and tipped with brown ochre.

PLATE CCXIX.

SANDERLING.

ARENARIA CALIDRIS.

The Sanderling is a periodical visitant in Great Britain during its vernal and autumnal migration, and is said to have been obtained on most of our sea-shores. Its geographical distribution extends over most of the northern parts of Europe, Asia, and America; it inhabits the coasts of Iceland, Greenland, the Hudson's Bay, Labrador, and some part of Siberia; descending along the borders of the rivers and principal lakes as far as Persia. During its migration, it visits, in Europe, the coasts of the Baltic, and Sweden, but principally those of the northern Atlantic; also England, Germany, Holland, and France, preferring thus the sea-coast, since its occurrence inland is but rare. The time of its migration is September and April, going northward to breed, and southward to avoid the rigour of the winter season. During the month of November, its numbers in Holland are very great, although it does not remain there during the winter; on its return in the spring, it remains on the Dutch coast to the end of May. The migration takes place during the night, and principally along the sea-shores, or across the sea itself; and the

locality it frequents during the daytime is flat, sandy, and shingly ground, in preference to muddy or boggy spots.

The predominant white feathering of the Sanderling distinguishes this bird, as well on the wing as on the ground, from most others of its tribe; and the plumpness of its figure, shortness of its neck, as well as the puffed up feathering of the rump, enable a person who is acquainted with it to single it out at a glance.

In its movements on the ground, the Sanderling shews much ease and swiftness, although it rarely runs to any great distance, but flies up if hurried; while in the pursuit of food it carries its back quite horizontal, and its head and neck lowered towards the ground. Although this species does not run great distances unprovoked, still it is always in motion, and remains longer in one and the same spot than most of the shore birds; it seldom becomes stationary except for the purpose of roosting, at which time it frequently rests in a sitting position.

In its flight the Sanderling is very strong and graceful, extending its wings at greater length than most others of its family. When the bird changes its ground, it flies invariably in the direction of the shore, very little above the surface of the water, avoiding every obstacle on the land, by skirting it. When it alights, it sails a short distance and then flutters a little before touching the ground, in order to break its descent.

The Sanderling is not shy in any degree; it is harmless and pleasing, and allows a person quietly to approach within a few paces, and affords him thus sufficient leisure to watch its manners and motions. If fired at, the bird only gets up and flies to a short distance, it can therefore most generally be obtained even by an inexperienced sportsman.

Sociability among its fellows is also one of its good qualities, for whether the party consists of few or many, they always keep together, either during their migration, or their stay in a place, and when they are forcibly separated they unite again and again in the air. In Holland, where the Sanderling appears in such numbers, the flocks of them amount frequently to many hundred individuals, thus literally covering the ground where they alight to some extent. When a few only are assembled, they generally attach themselves to some flight of other birds of their size and habits, and even follow them wherever they go.

The call-note of this little bird sounds like the word *pit, pit!* it is uttered in a high but very soft tone, and therefore not heard at a distance.

In confinement there cannot be a more pleasing and tame bird than the present species, and it is therefore easily kept.

The food of the Sanderling consists in small worms, marine insects, small crustacea and the larvæ of insects, which it obtains by probing with its beak in the sand immediately after the waves have receded, and also from among the pebbles which retain the substances that are washed up by the last waves.

As food for the table, the Sanderling is very good, and in most cases the bird is not only in good condition, but covered with fat to an incredible degree.

The reproduction of this species is believed to take place in the most northern latitudes to which it penetrates, but up to the present time nothing more is known on the subject, although several naturalists have tried in vain to find the nest and eggs.

Before we enter on describing the Sanderling's plumage, it is not out of place to remark how much the writers

of former times have been led into the error of calling the same species by different names, through the changes that many birds undergo during their maturing moults.

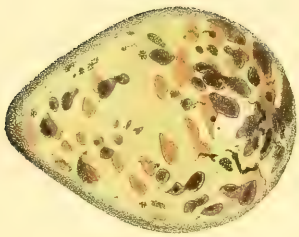
The length of this bird is about eight inches, its wing nearly five inches; the beak eleven lines; the tarsus eleven lines; the middle toe not quite nine lines.

The plumage of the adult male in summer is the following; a space between the eye and beak dusky, above which extends a buff-coloured streak, passing over the eye. The top of the head is rust coloured, with a black spot to each feather, some having white tips; the cheeks are white in front, spotted with dusky, their hinder edge tinged with rufous; the nape, hinder part of the neck, sides of the neck, back and scapulars, are rufous, the feathers being all marked with black, and some few tipped with white; the tertials are black, and have rust-yellow edges; the quills and two middle tail-feathers are dusky; the greater and lesser wing-coverts are dusky, with the centres of the feathers darkest, the lower part of the back and rump dusky, barred with cinereous, and reddish edges to the feathers; the chin, throat, sides and front of the neck, and upper part of the breast are more or less marked with black and rufous, as represented in our plate. The beak, legs, and feet are bluish-black, the eyes brown. All the under parts are pure white.

In the winter plumage the upper parts of the bird are pearl-grey with dusky shafts to the feathers; in place of the dusky space between the beak and eye, it has only a small black spot just before it; the last quill-feather in the wing and the two middle tail-feathers are dark ash-coloured. The wing-coverts are all dusky with pale edges to each feather, the larger wing-coverts are broadly tipped with white, forming a bar across the wing; the lower part

of the back and rump are cinereous in the middle, and white at the sides; the upper tail-coverts are white. The feathers around the base of the beak, a streak over the eyes, the chin, throat, breast, and all the under parts, are pure white, as also the eyelids.

The young bird of the year resembles the adult in the markings, but the rufous colouring is quite wanting, with the exception of a dull white that edges the feathering of the upper parts; the under parts are all white.



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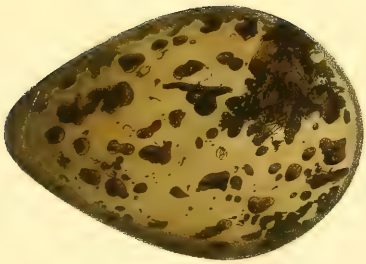

217.

PLATE CCXX.

GOLDEN PLOVER.

CHARADRIUS PLUVIALIS.

The Golden Plover is indigenous in Britain, although not many, comparatively speaking, remain here to breed; but their numbers receive a great accession in autumn from large flocks which migrate southward from their breeding-grounds in high northern latitudes, to pass the winter in our milder regions. During the winter these flocks inhabit low, marshy grounds, and the neighbouring fields of turnips, fallow lands, or meadows.

The geographical distribution of the Golden Plover, ranges over many parts of the globe, principally the northern half of it; it is known to inhabit periodically the Hudson's Bay districts, Canada, Siberia, Persia, and the East Indies. In Europe it occurs in Russia, Norway, Sweden, Iceland, the Faro Isles, the Hebrides, Scotland, England, Holland, and every country southward, to the borders of the Mediterranean; and in Sardinia it is more numerous during the winter than anywhere before named; it also reaches Syria.

The localities above mentioned are its most frequented haunts with us, but it also frequently occurs on open heath grounds, flat or hilly, and in young corn fields, and

is therefore not exclusively attached to wet ground. About the latter end of September the present species arrives here from the north, first in small flocks, and during the month of October in larger, according to the season being more or less cold, earlier or later; this bird can bear cold very well, but sharp frosts, occasioning scarcity of food, naturally drive it southward.

Its migratory wanderings generally take place during the night, although pressing circumstances frequently oblige it to perform them during the day.

In the autumn its course is observable from the north-east towards the south and south-west, and in the spring from the south towards the north and north-east; it flies at such times at a great elevation, and at a very rapid rate, often in hundreds together, and, like many others of its kind, in a double line, being headed by one individual. When performing its journey over the sea, out of reach of land, and being overtaken by stormy weather or contrary wind, it has been frequently observed to alight on the water for rest, and after a while reascend and continue its journey.

The food of the Golden Plover consists in worms, small beetles, slugs, and other insects, vegetable matter, and berries of heath plants, which enable it to subsist on the produce of wet and dry ground equally; the principal feeding-times are morning and evening, also most part of the night, when the moon or stars enable it to continue its search: it roosts on the ground, standing under the scanty shelter of some grassy tuft or heath-plant, either during the night or in the middle of the day.

In confinement the Golden Plover is easily supplied with food, on account of the diversity of its taste, but worms and bread and milk will satisfy it very well.

The general appearance of the Golden Plover on the ground is peculiar enough to distinguish it from most others of its family, owing to its chequered plumage and thick round head; its gait is not less distinct, for it runs with great velocity and for a considerable distance, now and then stopping on some slight elevation, in order that it may look about to guard against danger, as circumstances may require.

On the wing the Golden Plover is very expert and swift, much resembling in that particular the lapwing; it utters its shrill note continually, and consequently often endangers its own safety; its note sounds like the word *tluwee*, *tluwee!* uttered at a high pitch, and considerably loud.

In our neighbourhood we have had opportunities of observing the manners of the present species for several years, and there are few winter visitors that have given us more pleasure to watch, or that occur in greater numbers; it will hardly be necessary to remark, that we speak of the meadows bordering on the Thames near Chertsey. When going out early in the morning we have seen several flocks, particularly from December till March, haunting the vicinity, and either running about in numbers on the ground, or sweeping low over our heads, and by imitating their call-note, they invariably approached within gun-shot; during the middle of the day they are either seen standing on the ground or skimming very low over it; and in the evening, when we have watched for ducks or snipes just before dark, we have seen whole flocks of the Golden Plover come over the osier-beds at an incredible rate from several quarters, flying in close crowds to their feeding-ground on the short grass, and under such circumstances it is easy to kill several of them at one shot.

The flesh of the Golden Plover is very excellent food, and, generally speaking, the birds are in good condition.

During rainy and drizzly weather the Golden Plover appears to be more active on the wing than at other times; when the frost is severe without snow, the bird leaves our immediate vicinity for heath ground, but if the snow covers the ground, and the weather is mild, they soon return to look for the spots that can afford them food, being exposed by means of thaw; such places being the *rendezvous* of the worms and insects that are called forth by the reappearance of light and air.

Although the reproduction of this species takes place in greater numbers in more northern countries than our own, to which the Golden Plover resorts in the spring of the year, travelling from the end of March till May, yet many remain behind in this and other countries during the breeding-season, and are then found upon open, heathy moors, chiefly in pairs.

The egg figured in our Plate was drawn from a specimen taken on Woking Common, in Surrey, a well known breeding-station for the Crested Plover. This specimen presents the peculiar form of the egg of this species in great perfection, the larger end shewing a very perfect semicircle, and the slope, which leads to the smaller end, exhibiting a true straight line.

The female, when choosing the locality for her nest, searches for a slight depression in the ground, and, after placing in it a few roots of heath-plants or grasses, deposits her four eggs, which we cannot better describe than by referring to our figure. We may remark, that the epithet "golden," usually applied to this bird, is equally applicable to its egg.

The female bird incubates the eggs alone, and after seventeen days the young come forth, and leave the nest as soon as they are dry; when danger approaches while the parent bird sits on the nest, she does not take wing, but runs to some distance before doing so, in order to mislead the intruder.

The measurements of the Golden Plover are as follows: its entire length about eleven inches, its wing, from the carpus to the tip, eight inches, the beak one inch, and the tarsus one inch eight lines.

The plumage of the adult bird in summer is jet black on the upper parts, the edges of the feathers being regularly spotted with gold yellow; the forehead and space above the eyes pure white, the sides of the neck the same, but spotted with black and yellow; the throat, front of the neck, breast, and belly, black; the eyes are brown, legs lead-colour, and the beak dusky.

In winter the top of the head and all the upper parts are dusky, with paler yellow spots on the edges and tips of the feathers; the sides of the head, neck, and breast, irregularly streaked, and spotted with raw umber brown, and grey; the throat, belly, and vent are white; the quills are dusky, with white streaks along the shafts; the greater wing-coverts are tipped with white; the eyes, legs, and beak much the same as in the adult in summer. The male and female are very nearly alike.

The young of the year are brown, with yellow spots on the upper parts, both colours being strongly mixed with greyish-ash.

The egg figured 220 is that of the Golden Plover.

PLATE CCXXI.

CREAM-COLOURED COURSER.

CURSORIUS ISABELLINUS.

The Cream-coloured Courser is a very rare, accidental visitant, not only in Great Britain, but in Europe altogether; three or four instances are on record of its capture in England, and it has consequently obtained a place in the list of British Birds. The information obtained from several ornithologists is, that this species inhabits most parts of Africa, but respecting its habits nothing has as yet come to light sufficient to enable us to enlarge upon it; and from the little we know of its habits, it appears very erroneously placed among the water-birds, since every specimen that has been captured in Europe was found on some sandy or stony, barren waste; in Africa it equally frequents such in a more decided degree, namely, the wide deserts; one specimen was met with on the European continent, on a sandy beach by an inland sea or lake, and when found was in the very act of drinking.

The food of the Cream-coloured Courser consists in insects and their larvæ, but neither vegetable matter, seeds, nor berries are supposed to contribute to its support.

The length of the Cream-coloured Courser is ten inches, the beak nine lines, the wing from the carpus to the tip

six inches; the tarsus two inches three lines; the naked part of the tibia nearly one inch.

The plumage of this species is soft and close; the forehead and top of the head are yellowish rust-colour; the hinder part of the head pearl-grey; over the eye begins a white band, that surrounds the nape below the grey colouring, and from the eyes runs another very ornamental velvet black band to the nape; over this black on the nape is a triangular black spot on the white, which enhances the beauty of the head very much; the chin, throat, breast, belly, vent and under tail-coverts are all white, with a tinge of yellow rust or cream-colour; the upper parts are the same as the forehead; all the tail feathers are tipped with white and marked with a lancet shaped shaft streak of dusky colouring, except the two middle feathers, which are of a uniform colour like the back feathers. The quills are dusky, the beak is dusky at its tip and buff coloured at the base, the eyes are brown; the legs are cream coloured, and grey at the joints and soles of the feet. The male and female are alike.

Young birds are transversely marked with dusky on several parts of the plumage, the black ornamental band about the head is narrower, of a dusky tint, and irregular.

PLATE CCXXII.

DOTTEREL.

CHARADRIUS MARINELLUS.

The Dotterel is a summer visitant in Great Britain, arriving, from its more southern winter quarters, on its way northward, to breed; some remain here in places suitable to their habits, but their numbers are not so great as formerly, owing probably to the increase of cultivation.

The geographical range of the Dotterel is extensive, but not so much so as some others of its family; in the spring of the year it migrates to the northern countries of Europe and Asia for the purpose of breeding, such as Siberia, Finland, Lapland, Norway, Denmark and Sweden, but many pairs remain to breed in the intermediate countries over which they travel. The winter quarters of this species are the south of France, Spain, Italy, the islands of the Mediterranean, Turkey, Tartary, and Persia. In Holland this bird does not frequently occur, as the locality does not suit its habits.

The favourite haunt of the Dotterel is the most barren, uncultivated ground, where, at most, heath-plants are thinly scattered. Dry, sandy sides of the highest mountains of Scotland and Westmoreland are the places to look for it; and the only time it is ever seen by the water is in the even-

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ing or early in the morning, when it requires drink or bathing, of which it is very fond. On the moors where the Ptarmigan abounds, this bird is very commonly seen in great numbers, even as high up the northern Alps as that region where vegetation ceases.

In Central Europe, where the countries are only hilly instead of mountainous, the Dotterel frequents short grassy meadows, large wastes, and the sides of hills where sheep are grazing, but neither in wet places nor on the banks of lakes or rivers is it ever seen.

The migratory journeys are performed in the daytime, rarely at night, when the flock flies at a great height, giving notice of its approach by the call-note; in the autumn these flocks may be seen from August till the month of October, and are then more numerous, owing to the addition of the young broods, that swell their numbers; in April the return to the north takes place, during which time it is by far more difficult to obtain specimens than in the autumn. These birds keep no regular order when journeying, like the Plovers, but move on in a body very close together.

When the Dotterel stands on the ground, the dusty colouring of the upper plumage is well adapted to render it unnoticed, as it harmonizes perfectly with the dry sandy locality it prefers; its body is most generally carried horizontally, standing on straight legs, or in the manner represented in our plate.

Its movements are elegant, but it does not seem to be fond of unnecessary exercise, as it frequently stands looking about for a length of time; however, when endangered, it can run with great velocity. Where the present species abounds during the summer months, its feet are frequently found to be loaded with gossamer, which it accumulates to a burdensome extent.

The flight of the Dotterel is very quick, and the bird is exceedingly dexterous in its motions; it avoids flying unnecessarily in windy weather, and when compelled to do so, flies low to the ground.

By nature this species is not shy, but rather the reverse, and has consequently been called stupid, since it has, under many circumstances, been approached by travellers and sportsmen to within three or four yards; and is even reported to imitate the actions of a person who stops to watch it on the ground; it is also very frequently employed in dusting itself, and so allows persons to approach it unnoticed; but we do not believe all that is said respecting its folly, as many well-known shy birds remain close on the ground, not only when a sportsman approaches, but even when a dog points the game out to its master; if the Dotterel should act the part of a mocking-bird, it remains a question whether the antics of the bird or the beholder are most calculated to excite risibility.

The call-note of the Dotterel sounds like the word *durrr* or *drew*, expressed more in the tone of a flute than in the shrill note of a whistle; it also utters the word *dutt, dutt!* while in the act of taking wing.

In confinement this bird becomes soon tame, but, owing to its tender nature, it hardly ever thrives above one year.

The food of the Dotterel is chiefly insects and their larvæ, worms, and sometimes a little vegetable matter. The worms are obtained towards the evening, and at other times of the day small beetles and larvæ of insects are carefully picked up and greedily devoured. On the mountains in the north countries, the smaller grasshoppers that abound there have been found in this bird's stomach, and also the tender leaves of the *Geum montanum*. In the evening the bird approaches the water in order to quench its thirst or

to bathe, and soon after it runs into the neighbouring fields, where it remains for the night, and by the morning it returns to its before mentioned haunts on the dry land, to recommence its search for food in the usual manner.

The reproduction of the species takes place in many parts of Europe; especially the habits of the Dotterel are well known during the breeding season to the shepherds that watch their sheep on the mountains, and it is a remarkable fact that the numbers of this species have not only very much decreased in England, but equally so on the mountains and hills in Germany; with us the reason assigned is, that the Dotterel is constantly pursued by sportsmen, who are very anxious to obtain its plumage for the purpose of making artificial flies for fishing: other causes probably exist, that are difficult to ascertain.

The nest of the Dotterel is a mere hollow, scratched in the surface of the ground, and in it a few mosses and lichens are carelessly placed.

The eggs, which vary from three to four in number, are not easily obtained in this country; their texture is dull. The bird sits very close, and remains till danger approaches it, nearly to touching, and then it runs or flutters off for a distance, never exceeding twenty or thirty paces, where it awaits the result. On leaving the nest it utters the same shrill but soft notes as the lark. The male and female incubate the eggs by turns, which a friend of ours has proved by killing the sitting bird on the nest, which was ascertained to be a male. The chief of the young broods are running about by the end of June, although some sitting birds have been found in the middle of July; the young leave the nest as soon as they are hatched, and the parent birds are apparently very much attached to them.

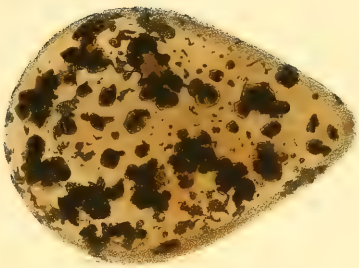
The Dotterel measures nine inches and a half; its beak

seven lines and a half; its wing from the carpus to the tip six inches; the tarsus one inch and a half.

The plumage of the adult bird in summer is as follows: the cheek, throat, and band over the eyes white; the top of the head and occiput rich brown; the back, wing-coverts, and scapulars ash-coloured, tinged with olive, each feather narrowly edged with yellowish-white; the greater wing-coverts are pearl-grey, edged with white; the nape ash-coloured; the sides and fore part of the neck also ash-coloured; a white gorget ornaments the upper part of the breast, which is surmounted with a black line; the lower part of the breast and sides are rich burnt sienna; the central part of the belly, just above the legs, is black; the hinder part of the belly, vent, and under tail-coverts are white, with a strong tinge of rufous; tail cinereous at the base of the feathers, dusky black towards their extremities, and tipped with white. The beak is black; eyes brown; legs olive, tinged with ash; the quill-feathers are ash-grey at their base, and dusky towards the tip, the first with a white shaft.

In winter plumage the top of the head is ochreous yellow with dusky spots; the fore part of the neck cinereous ash, with yellow edges to the feathers; the breast and belly also cinereous with yellow edges; the upper parts are cinereous, spotted with dusky and tile-red edges to the feathers of the back, yellow ochre edges to those of the wing, except the primaries, which are black; the gorget is not framed by such a decided black line, and the orange-brown and black on the under parts are entirely wanting.

The egg figured 222 is that of the Dotterel.



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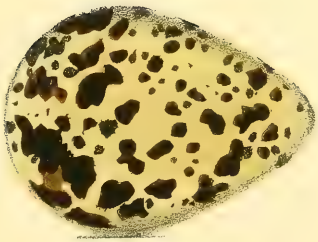

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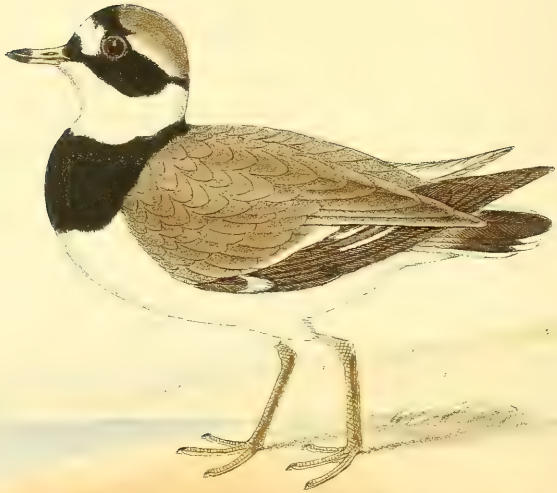


PLATE CCXXIII.

RING DOTTEREL.

CHARADRIUS HIATICULA.

The Ring Dotterel is indigenous in Great Britain, and very generally distributed over the coast and borders of lakes and rivers; its geographical distribution is far and wide, it is found in every quarter of the globe, from the arctic to the antarctic circle; in Greenland and in the Sandwich Isles; the Hudson's Bay, Virginia, Carolina, Jamaica, and the Brazils; in Siberia and Tartary, in Nubia and the Cape of Good Hope. In Europe it inhabits Scandinavia and Iceland, Spain, Italy, and Greece, and all the intermediate countries, some in greater, some in lesser numbers. In Liefland, Prussia, Denmark, Sweden, Norway, the Baltic, and all the coasts of the northern ocean; and in Holland it is very numerous.

In every country the Ring Dotterel frequents the borders of seas, lakes, and rivers, of large and small dimensions; and we have obtained specimens on the banks of the Thames, near Chertsey, in Surrey.

Although the present species remains with us the whole year, it is migratory in many countries, passing the summer months in the northern and the winter in the warmer climes. Its migrations are performed during the night, travelling

south during the months of September and October, and returning in April to its summer quarters.

The principal locality which pleases the Ring Dotterel is a sandy sea-coast, but it does not so exclusively remain there as other species hereafter to be described, inasmuch that the sea and its productions are not essential to its subsistence; and it also frequents dry sandy flats and waste lands in the vicinity of water, for water it requires at all times. On muddy or marshy shores it is never seen.

Its breeding places are on the already named sandy shores of the sea, the most barren and devoid of vegetation. On the mountainous coast of Norway, this species breeds at a considerable elevation, almost close to the patches of snow that remain there late on the surface.

When the Ring Dotterel is on the ground in search of its food it is a very pretty object in consequence of the contrasting colours of its plumage; its shape is not exactly one of the most beautifully proportioned, but it is peculiar, owing to its round head and plump figure; it carries its body generally in a horizontal manner, with its breast somewhat lowered and its neck short: when in the act of running it lengthens its neck, and thus becomes more slender; it runs very fast, and turns its body to the right and left, without showing its direction beforehand with its head; it runs very much in the manner of the wagtail, stopping every moment for the purpose of looking round; and as this is performed in quick succession, it distances itself very soon from its pursuer without the least appearance of exertion. The flight of the Ring Dotterel is very quick, and performed with moderate flapping of the wings; on being met with on the shores, it frequently flies in a semicircle low over the surface of the water, and soon settles again, opening its wings above its back before flying and just

after alighting; during its migrations it flies very high through the air.

Among the virtues of the present species, we cannot reckon sociability among its fellows, for, except during the time of migration, when the number hardly exceeds twenty or thirty, a single pair, and frequently only a single bird, shews itself in a given spot; during the breeding-season, the males often fight in the manner of bantams, not however shewing so much courage, for one of them soon gives in. This bird is very active, particularly towards the evening, continuing its exertions during light nights until the morning; in the middle of the day it roosts on the ground. The call-note and the cry of fear resemble each other very much; the first is only an often repeated *trull, trull, trull!* and the latter, when startled, a single *truwee!* both expressed in a pleasing flute-like key. By nature, this bird is very hardy, and may easily be kept in confinement, becoming tame, and feeding willingly on bread and milk, &c.

In a wild state, the Ring Dotterel feeds on small beetles, insects, and their larvæ, small worms, and marine insects of divers kinds.

This bird is fond of bathing, and often soaks itself so entirely, that it can hardly take wing.

The breeding locality of the Ring Dotterel has already been described, and we only need repeat, that the sea-coast supplies it by far more frequently than lakes or rivers. There is no nest made for the reception of the eggs of this species; they are deposited invariably on the barren ground, namely, the dry sand just above high-water mark; the number of the eggs for a brood is three or four, which are incubated by both parents; the pair are very much attached to each other, and shew great anxiety as well for the safety of one another, as for that of their eggs and young. After

fifteen or sixteen days, the young come forth, and run about as soon as they are dry; they find their safety on the approach of danger, by lying flat on the ground.

The Merlin seems peculiarly fond of the Ring Dotterel's young brood, and may frequently be seen to haunt the breeding-places of this species. The manner in which the Ring Dotterel, as well as several other species, are to be caught on the sandy sea-shore, is by means of a stick, of about three feet long and an inch in diameter; to this stick several horse-hair nooses are fastened, and the stick being pressed flat in the sand, it becomes invisible, leaving the horse-hairs only exposed. This mode is often practised, and repays the trouble well, as the flesh of the bird is very good for food.

The Ring Dotterel measures seven inches and a half in length, its beak seven lines and a half; the wing, from the carpus to the tip, five inches; the tarsus eleven lines and a half.

The back and nape of the head, and all the upper parts are cinereous-brown, and the remainder of the plumage white, with the following black markings; over the eyes a broad black band runs across the head, another extends from the forehead and whole width of the upper mandible below the eyes, over the cheeks and ear-coverts, and meets at the nape; the white from the throat surrounds the nape below the black just described, and is entirely bounded by the black that covers the upper part and sides of the breast, and encircles the neck at its base. The quills are dusky, the secondaries shew the white upon each of the quills about their middle; the greater wing-coverts are tipped with white, thus forming a white bar across the wing; the tail has the middle tail-feathers uni-coloured like the back, but darker at their ends; the next are tipped with white,

and the outer entirely white; the upper tail-coverts are white; the eye dusky brown, the eyelids yellow; the beak is orange at the base, yellow about its centre, and black at the tip; legs and feet orange-yellow, claws black.

The female is marked much the same as the male, but the markings on the white ground are dusky, where they are black in the other sex.

The young of the year has only a dusky mark between the beak and the eye, the forehead dirty-white; the feathers of the upper parts are edged with pale yellow, the gorget on the breast is cinereous brown; the beak entirely dusky, the feet yellow.

The egg figured 223 is that of the Ring Dotterel.

PLATE CCXXIV.

LITTLE RING DOTTEREL.

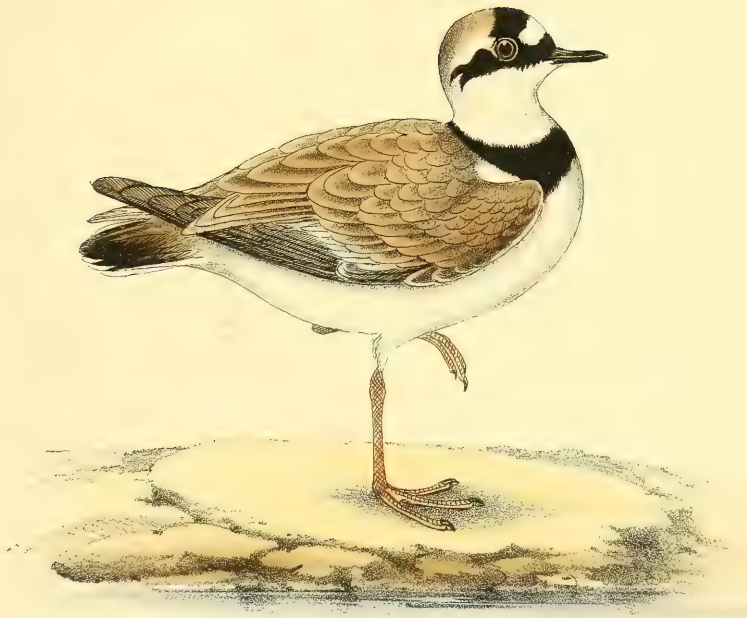
CHARADRIUS MINOR.

The Little Ring Dotterel has only lately been added to the list of British Birds, in consequence of a specimen that was shot at Shoreham in Sussex, but we presume that its great resemblance to the foregoing species has been the cause of its remaining unnoticed, as we have undoubted authority that the bird is frequently met with on the European continent, and that its geographical distribution is extensive.

This species does not appear so far north as the *charadrius hiaticula:* it is known in Sweden, but rare in Holland; in the south of France, in Italy, and Switzerland it is pretty numerous, as well as in most of the southern countries of Europe, also in Nubia, Abyssinia, and the Philippines; Temminck has received specimens from Japan.

In central Europe the Little Ring Dotterel arrives rarely in March, but more frequently in April, from its warmer winter quarters, and retires again in August and September for the winter.

The migrations are performed in pairs in the spring, and in parties of from five to ten in the autumn, and invariably



during the night. During this time of the year they are very noisy on the banks of rivers and lakes, uttering their call-note, running and flying about incessantly.

The locality generally preferred is the bank of a river, lake, inland sea, or large pond, by far more unfrequently the sea-coast, differing in this respect greatly from the foregoing.

Sandy and gravelly soils suit its habits best, and more particularly the banks of running streams, such as the Elbe, Mulde and Saale in Germany, where the ground is flat, and hardly covered by vegetation, whether near or distant from towns or villages, and in such spots it annually breeds.

The busy time for this pretty Little Dotterel is morning, evening, and the greater part of the night; in consequence of which it roosts during the day on the ground, either standing by the water-side or squatting very closely, and may thus very easily be approached with reasonable caution.

The habits of the Little Ring Dotterel are very much the same as those of the foregoing species, and this similarity adds consequently greatly to the chance of their being undistinguished from one another by the general observer; it runs not quite so fast; its flight is also quick, and performed in the same manner as that of the *charadrius hiaticula*. When the present species is endangered by the approach of man, it frequently takes wing, and alights upon some floating weed, where it remains till the intruder is distanced: this latter action is peculiar to this species.

During the breeding-season this bird is sociable, not only towards its own species, by having several broods in the same locality, but also towards others of the shore birds, such as terns, that frequent inland shores during that time.

The call-note resembles the sound *deea*, *dut*, or *dit*, several times repeated.

When obtained young, this species will live for a couple of years in confinement, and becomes very tame and amusing, and feeds on bread and milk, intermixed now and then with worms, mealworms, and other insects.

In a wild state the food of the Little Ring Dotterel consists in coleopterous insects, flies, worms, and the larvæ of insects, also water-insects, which it obtains by wading in the shallows.

The spot chosen for the nest of this species is generally where the smallest particles of gravel cover the surface of the ground, but never on the fine sand, as some authors have stated; the nest itself is a perfect rounded cavity in the ground, or layer of small stones, and in it four eggs are deposited, of the size and colour represented in our plate. The parent birds incubate the eggs principally during the night, when the weather is fine, also during the day when it rains, or when the sun is overshadowed by clouds; and in sixteen or seventeen days the young run about, which have the instinct of hiding themselves so cleverly on the appearance of danger, behind a stone or weed, that it is very difficult to find them without the aid of a dog.

The size of the Little Ring Dotterel is not quite seven inches in length; the wing five inches and a half; tarsus eleven lines and a half; the naked part of the tibia four lines; the beak six lines.

The plumage of this bird in adult summer-livery is very nearly the same as that of the foregoing species, but the shape of the bird being much more slender, and the legs and feet so widely different, it is strange how the two species can be mistaken when compared. The feathers on the back of the head, and from the back extending over

all the upper parts are a delicate drab colour; the forehead, chin, and neck all around, and all the under parts are pure white, with a well-defined black ring around the throat, chest, and sides of the upper half of the breast; the quills are dusky, with a white shaft to the first primary feather; the outer tail-feather is pure white, the rest tipped with white; the beak is black; the eyes dark brown, with the lid ochrous-yellow; the legs and feet are flesh-red, with a tinge of yellow; claws black.

The female resembles the male, but the black ring around her neck does not cover so much space.

The young bird has the edges of the feathers bordered with paler colouring, the black entirely wanting, and in its place the colouring of the back in a darker shade; the eyelids are white, and the legs are flesh-coloured with grey joints. The white on the under parts not so pure.

The egg figured 224 is that of the Little Ring Dotterel.

PLATE CCXXV.

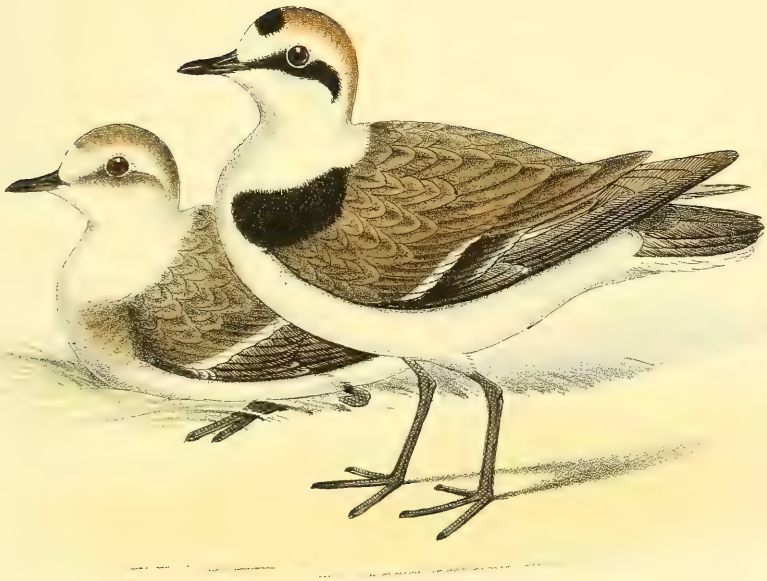
KENTISH PLOVER.

CHARADRIUS CANTIANUS.

The Kentish Plover has been sometime known as a summer visitant in Great Britain, specimens having been obtained as early as the year 1787, according to Dr. Latham, and its name was given it in consequence of the locality where it was first met with and noticed. Divers other specimens have since come under the notice of ornithologists, not only on the coast of Kent, but in Suffolk and Norfolk. This species is very generally distributed over the milder countries of Europe, Asia, and North Africa; in Europe it periodically visits Britain, France, Holland, the shores of the Adriatic, the Baltic, and the Mediterranean. It rarely ascends as far north as Sweden, as the climate does not suit its habits. In Asia it inhabits Tartary, and in Africa, Egypt and Nubia.

In the true sense of the word the Kentish Plover is a sea-coast bird, and rarely occurs on the banks of rivers or sweet water. During the time of migration it frequents the mouths of large rivers, and the islands that are along the coasts, but at most times of the year it is exclusively to be met with on the immediate sea-shores.

By the end of April and during May this species arrives from the warmer climes, at its breeding places, which consist in the grass-covered ridges of low land that are broken by unusual high tides, or that are kept very short of vegetation by the occasional feeding of cattle, when the season allows it; the ground that is covered with maritime plants, and here and there interrupted by barren sand, that is partly bestrewed with mussel-shells and small crustacea, generally



attracts this bird in considerable numbers; black muddy shores equally invite it, where the tides wash the sea-weeds up, with the rich provender attached to them. Where high water forces the Kentish Plover to leave its ground, the bird not unfrequently retires to the neighbouring meadows and ploughed fields, or to a greater distance to heath-ground and pasture land.

The general appearance of the Kentish Plover when on the ground is rather bulky for its size, and the predominant white of its plumage very soon discovers it to the beholder; when approached it runs very fast, and to a considerable distance; after which, as the traveller approaches, it circles to one side, still keeping the distance it has obtained, and shewing the beholder at most times its profile. Its flight is very quick, and performed much in the manner of the ring-dotterels, but exceeding them by far in speed.

Before taking flight it opens its wings wide above its back, and generally skims the surface of the water when it does not intend to leave the neighbourhood; on alighting it skims a short distance, and on touching the ground with its feet it opens its wings again wide, then runs a short space and looks round before it begins its vocation of feeding.

Its food consists in worms, marine insects and their larvæ, which it naturally finds in considerable quantity on the before-named ground; during high-water worms and other insects supply the place of its more favourite food.

The nest of the Kentish Plover is placed just above high-water mark, on the ground, and consists of a hollow scratched for the reception of the eggs, and lined with a few blades of grass, or other faded vegetable matter. The eggs are four in number, and so different from all others that they can hardly be mistaken. During the day this bird rarely sits on the eggs, but resembles the former species in this respect, and when any danger draws near, the bird immediately runs off the nest, which of course makes it a very difficult matter

to find the eggs. In about seventeen days the young run about, at which time the parents become very uneasy, and flutter about the person who approaches, uttering their cry of fear, *pwee, pwee ! pitt, pitt !* or *tirrr, tirrr !*

The measurements of the Kentish Plover are as follows: its entire length, nearly seven inches; its wing from the carpus to the tip measures four inches four lines; the tarsus one inch, and the beak seven lines.

The plumage of the adult male in summer is bistre over all the upper parts, from the root of the neck to the tip of the tail; the greater wing-coverts are tipped with white; a white base to the secondary feathers, and white shaft to the spurious wing; the two outer tail-feathers are white; the forehead, and a broad streak over the eyes, white; the space between the beak and eye black, which colour extends below the eyes as far as the ear-coverts; the chin, cheeks, throat, breast, belly, vent, and under tail-coverts are pure white; on the sides of the breast above, and under the carpus of the wing, is a perfect black patch; the frontal part of the top of the head is black; the top and back part of the head brown ochreous-yellow; the eye-lids are white; eyes brown; the beak and legs are bluish black; claws black. In the female the black markings are dusky and more confined.

The young of the year differs by having the crown and back part of the head yellowish-brown; the space between the beak and eyes, and the band below the eyes, and ear-coverts, yellow-brown; the colours on the back are paler, and the patch on the sides of the upper part of the breast is cinereous pale-brown, surrounded by ochre-yellow.

The egg figured 225 is that of the Kentish Plover.

END OF THE FIFTH VOLUME.

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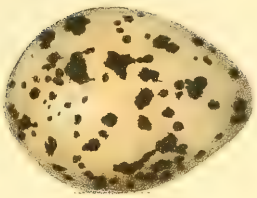

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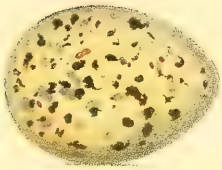

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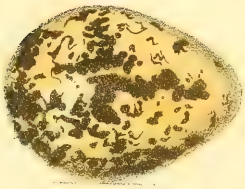

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